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**Leaflet Regarding Rules of Publication.**—CALIFORNIA AND WESTERN MEDICINE has prepared a leaflet explaining its rules regarding publication. This leaflet gives suggestions on the preparation of manuscripts and of illustrations. It is suggested that contributors to this Journal write to its office requesting a copy of this leaflet.

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## EDITORIALS†

### MEDICAL PREPAREDNESS

**Medical Preparedness Is a Live Issue.**—In the last several numbers of the OFFICIAL JOURNAL, informative articles and items concerning Medical Preparedness were given considerable space; the backbone of the November issue, in which rosters of medical examiners appeared, having been marked to attract attention, by the small block letters, MEDICAL PREPAREDNESS. When current world events are interpreted, the signs indicate that, for some time to come, the department on Medical Preparedness is almost certain to have a place each month in CALIFORNIA AND WESTERN MEDICINE.

\* \* \*

**Members Entering the Military Services Make Sacrifices.**—To some members of the Association who are not yet in the Army or Navy Medical Reserves, or who are not in the draftee age limits, it may seem that Medical Preparedness is being overstressed. Not so, however, does it appear to physicians who have volunteered, or have been called into service, and who, on short notice, have had to give up private practice to assume military duties for an indefinite period; in the future to return home, and attempt to rebuild or practically start anew, where they left off, at the time of entering upon a transitional military career. Family and other responsibilities, when such situations arise, assume large rôles.

\* \* \*

**Medical Examinations for Selective Service Boards.**—Even in what might be termed the transient work associated with medical examinations of draftees, as carried on for local or other selective service boards, demands on the professional time and efforts of physicians are of considerable moment. It is not surprising, therefore, in so massive an effort as that of examining all men between the ages of 21 and 36—(a work carried on, for instance, by local boards working often in vastly different environments, with lists of selective service draftees running as high as seven thousand men)—that the demands upon the energies of physicians attached to certain boards have been more than could be expected of such doctors who,

† Editorials on subjects of scientific and editorial interest, contributed by members of the California Medical Association, are printed in the Editorial Comment column which follows.

while giving gratuitous service to the Government, nevertheless were also required to maintain supervision of the care of private patients, as well as meet the responsibilities of their own families.

\* \* \*

**Question of Dues-Exemptions of Members in Military Service.**—Among matters of importance for early consideration, county societies may wish to give attention to by-law amendments that would grant exemption, from local dues, to members who had entered military services, the same to cover the calendar years in which they are so engaged. At the annual session at Del Monte, in May next, in the House of Delegates, the California Medical Association will no doubt consider similar amendments in regard to State Association dues.

For every community, it is assumed that the physicians who continue in civil practice will keep in mind the heavy contributions made, on behalf of the country's welfare, by those of their fellows who enter military service. Also, that, through liaison or committees, the component county societies will use all proper endeavors to conserve, in so far as may be possible, the rights of members who have so been called, until such time as they again return to civil practice.

\* \* \*

**State Committee Is Maintaining Contacts.**—Concerning these activities, it should be kept in mind that the California Committee on Medical Preparedness, of which Dr. Philip K. Gilman is chairman, is at all times at the service of local committees, and willing to give advice and aid as may be indicated. At San Francisco, Doctor Gilman of the State Committee, and Dr. Charles A. Dukes of the National Committee, on Medical Preparedness, working through the Central Office of the Association, have already been constantly on the job, holding conferences with medical staffs of the Ninth Corps Area at the Presidio, and with representatives of the medical division of the Adjutant General's office in Sacramento, as well as with many physicians who have brought up their personal problems for consideration.

For additional information concerning these matters, readers are referred to the department captioned, "California Committee on Medical Preparedness." (See page 31.)

#### ANNUAL SESSION: DEL MONTE MAY 5-8, 1941

**What Makes a Successful Annual Session.**—In the life of a state medical association, an annual session is construed to have been successful if members, who were in attendance, returned to their homes with better and clearer ideas on vital topics concerned with scientific and organized medicine. Referring, therefore, to scientific activities, since satisfactory programs are of the first importance, it is necessary that a sufficient number of essayists or speakers shall offer clarifying discussions on topics of pertinent interest, and that other attrac-

tive features, such as scientific exhibits and the presentation of medical and surgical films, shall be provided. Some further comments regarding these features may be in order.

\* \* \*

**Responsibilities of the Section Officers Regarding Papers, Scientific Exhibits and Films.**—To the officers of each of the twelve scientific sections is assigned the task of deciding whom they wish to invite to present papers and, which papers, that have been independently offered to the Sections, are of a character to fit into a contemplated program in which certain subjects, by committee agreement, have been outlined for special emphasis.

The roster of Section officers is printed on advertising page 6 of every issue of CALIFORNIA AND WESTERN MEDICINE. Correspondence, then, should be sent to the respective Section secretaries, and members who wish to offer papers for consideration, should immediately write, if they have not already done so, since the final program will probably be determined at a joint meeting of the California Medical Association Committee on Scientific Work and the Section secretaries, to be held in January.

What has been stated, concerning papers for the Section programs, applies also to scientific exhibits and films. Correspondence regarding these should be sent to the Association Secretary, 450 Sutter Building, San Francisco.

\* \* \*

**Hotel Rates Are Listed in This Issue.**—The matter of securing proper hotel accommodations is always of interest to everyone who contemplates attendance, and because no single hotel can provide quarters for all who will be in attendance at Del Monte, a list of hotels located on the Monterey Peninsula, with their rates, is given in this issue. (See page 30.)

Early request for accommodations is desirable, since delay may make for inability by managements to allocate the facilities desired.

The attention and coöperation of members in regard to the above can be expected to make for an advance guarantee that the annual session of 1941 will measure up to the best standards of our own and other state medical associations.

#### ANOTHER LEGISLATIVE YEAR

##### Rôle of the Medical Profession at Sacramento.

Once again, the State of California is confronted with a legislative year, by which is meant a first six months of the calendar, when citizens in all walks of life will live through a period of greater or less expectancy, wondering not only what the legislative hopper will bring forth in the form of approved measures, but whether His Excellency, the Governor, will ratify or veto this, that, or other measure that may have received the approval of both State Assembly and Senate.

Hence, the rôle of the medical profession at Sacramento may be said to be one of watchful waiting. Records of former legislatures indicate that between six hundred to one thousand measures—of the several thousand that may be introduced by assemblymen and senators—will contain provisions having immediate or secondary relationship to medical standards and public health work. Because these inclusions are not infrequently most deftly concealed in proposed statutes having titles and context which would indicate neither near nor even a remote affiliation with matters medical, it is incumbent upon the California Medical Association Committee on Legislation not only to scan, but to read, with discrimination, the great majority of all measures submitted. Not only that, but as the days of the legislative session roll on, the committee must be equally alert to amendments of real significance in public health fields.

\* \* \*

**California's Fifty-Fourth Legislature Convenes on January 6, 1941.**—The next California Legislature—the State's fifty-fourth—will convene on the first Monday in January, the sixth day of the month, and will remain in session for the receipt and general consideration of prospective laws during January—to recess then in February, for further study and conferences with citizens of their local constituencies, after which the session will reconvene and continue until adjournment. The last legislature adjourned *sine die* on June 20, 1939, holding the record for length of session: 97 legislative days; 170 calendar days; 30 constitutional recess days.

\* \* \*

**California Medical Association Committee on Public Policy and Legislation.**—At the time of this writing, the California Medical Association, in accordance with resolutions of the House of Delegates, has caused two measures to be drafted concerning the Motor Vehicle Code and public pounds. These measures are to be submitted to the Fifty-fourth Legislature.

Proposed statutes to be presented by the Board of Medical Examiners, the State Board of Public Health and other bodies will receive early consideration by the California Medical Association Committee on Legislation and Public Policy, of which Dwight H. Murray of Napa is now chairman, Dr. J. B. Harris having resigned, but continuing his cooperation as chairman of the Advisory Subcommittee of the California Medical Association Committee on Legislation. Correspondence on legislative matters, sent to the Central Office, will be forwarded to Doctor Murray, who may also be addressed direct.

\* \* \*

**Proposed Laws of Medical Interest.**—Comment on the proposed Basic Science law to be submitted not to the legislature, but through an initiative, will be found in this issue in the Committee on Public Relations department. (See page 40.)

It may be of interest to members of the medical profession to learn that a "legislative initiative" to

license naturopaths is being circulated. The number of signatures required for such a "legislative initiative" is considerably less than that for the usual initiative (minimum number of signatures required is 5 per cent of all the votes cast for all candidates for governor at the last preceding general election). The proposed naturopathic initiative will be presented to the legislature, and if not approved by this body, will be placed on the state ballot for vote by the electorate for approval or rejection.

In the August, 1940, issue of *CALIFORNIA AND WESTERN MEDICINE*, on page 56, comment was made editorially concerning proposed California laws submitted to the voters in past years through initiative petitions. As long ago as 1914, a proposed initiative law "to license drugless physicians" resulted in a vote of 223,000 in favor, and 462,000 against. In 1934, a proposed initiative to license naturopaths was defeated, 662,000 votes being cast for, and 1,115,000 votes against the measure. If the naturopathic sponsors secure the necessary number of signatures for their "legislative initiative," it will be interesting to watch the course taken by the measure in the legislature, and also when it appears on the state ballot, for referendum, approval, or rejection.

Concerning a compulsory health law for California, such as was submitted to the last legislature by Governor Culbert L. Olson's Committee, and which will, in all probability, again be presented to the legislature, no official announcement has been made at the present writing. Signs indicate, however, that such a statute will appear.

In the Capitol at Washington, a new Congress will convene and laws closely akin to the "Wagner Health Act" and the "Wagner-George Hospital Act," will, no doubt, again come to the fore.

\* \* \*

#### **County Societies and Physicians Should Maintain Interest in Legislative Proceedings.**

It is apparent, therefore, that component county medical societies will have work to do in the months ahead, and that it will behoove physicians to keep in touch with press reports on legislative matters, and to cooperate in fullest measure when called upon for aid. Important principles and issues are at stake!

#### **POSTGRADUATE ACTIVITIES**

**Medical Knowledge Is Not Static.**—California's course regarding postgraduate activities is not unusual, since, in a goodly number of other state medical associations, there have been like experiences. It is difficult to explain the backwardness of some local units in not utilizing their county hospitals and other facilities to provide, once or twice yearly, what have been aptly called "continuation medical courses from undergraduate days."

Physicians need hardly be told that the science and art of medicine are not static. Additions of new knowledge, through research workers and clinical



investigators, make for constantly changing vistas concerning disease in general and certain diseases in particular.

All physicians should be receptive to changing points of view in medical practice, although it is granted, in the routine of daily responsibilities, this is, at times, a quite difficult ideal to attain; and especially so, when absence from one's home city, in order to participate in refresher courses, may be for various reasons, practically out of the question.

\* \* \*

**The Institution of a Clinical Conference or Postgraduate Course.**—It is just here that clinical conferences held under local auspices may be of real worth to many practitioners. As has been so often stated, all that is needed, to carry through a successful conference, is the support and leadership of one or more members of a county society postgraduate committee, who will give earnest attention to the formulation and completion of a program that has been arranged in harmony with local facilities and needs. The California Medical Association Committee on Postgraduate Activities, through its chairman and secretary, is anxious to give all possible coöperation, not only through aid in the selection of guest-speakers on desired topics, but in supplementary publicity of courses, so that every physician in the territory included in a clinical conference plan may be informed.

\* \* \*

**Plans for Clinical Conferences Are Now in Order.**—Newly elected officers of each county society are urged to discuss with their governing boards and members the possibility of instituting a postgraduate conference to be held some time during the January-April period. A first requirement is that every county medical society shall have appointed a postgraduate committee, whose members, in turn, will promptly communicate with the California Medical Association Committee on Postgraduate Activities, even though nothing more is requested than advice on how best to proceed.

Every one of the forty component county units of the California Medical Association has some members who would gladly attend a postgraduate or clinical conference if it were made locally available; and, it may be added, all members of every county medical society profit through attendance at conferences where local and other colleagues are contacted, and mutual problems are discussed. The California Medical Association Committee on Postgraduate Activities, 450 Sutter Building, San Francisco, invites correspondence.

**Other State Association and Component County Society News.**—Additional news concerning the activities and work of the California Medical Association and its component county medical societies is printed in this issue, commencing on page 28.

## EDITORIAL COMMENT†

### FAILURE OF NONVIALE ANTIRABIC VACCINES

According to experimental evidence reported about a year ago by Webster<sup>1</sup> of the Rockefeller Institute, and currently confirmed by Wyckoff and Beck<sup>2</sup> of the Lederle Laboratories, a surprisingly large percentage of the nonviable antirabic vaccines now available in the American market are antigenically inert, incapable of stimulating the development of an appreciable antirabic immunity.

In order to develop reliable and inexpensive methods for the commercial control of antirabic vaccines, Webster selected young Swiss mice as the experimental animals. Mice three to six weeks of age are highly susceptible to this virus and are sufficiently uniform in their reactions for reliable statistical study. According to the technique currently recommended by Wyckoff, five daily intraperitoneal injections of dilute living virus, in one-eighth the dose recommended for dog or man, almost invariably lead to the development of a solid antiviral immunity. By the end of fourteen days, 90 per cent of the injected mice will resist intracerebral injection of 100 to 1000 MLD of homologous virus suspension.

Applying this technique to a titration of commercial vaccines, Wyckoff tested fourteen different batches of phenol-killed or chloroform-killed vaccine prepared by the same manufacturer. But three of these nonviable vaccines were sufficiently antigenic to stimulate the development of a solid immunity, while three were wholly inert, giving practically no trace of antirabic immunity. One hundred per cent of the mice vaccinated with these latter preparations succumbed to the routine intracerebral test dose. Wyckoff concludes from this evidence that current methods of manufacture are at fault, giving unreliable and inconstant products.

A similar absence of antigenicity was demonstrable on titrating vaccines manufactured by different firms. But one of the seven products tested was fully antigenic. Two of them were 100 per cent inert. Part of this failure is conceivably due to strain variations in the stock viruses used by different commercial firms.

As the initial step in the commercial control of nonviable human and veterinary antirabic vaccines, Wyckoff suggests elimination from the market of all batches of vaccine that prove antigenically inert by the Webster mouse test. Whether or not mouse antigenicity is parallel with human and canine antigenicity is at present unknown. Possible strain variations are also the subject of current study. It is encouraging to note that commercial firms

†This department of CALIFORNIA AND WESTERN MEDICINE presents editorial comments by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to all members of the California Medical Association to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

<sup>1</sup> Webster, L. T.: J. Exper. Med., 70:87 (July), 1939.

<sup>2</sup> Wyckoff, Ralph W. G., and Beck, C. E.: J. Immunol., 39:17 (July), 1940.



have taken the initiative in the solution of this important therapeutic problem.

P. O. Box 51.

W. H. MANWARING,  
Stanford University.

### ENDOCAVITARY ASPIRATION OF TUBERCULOUS PULMONARY CAVITIES

Attempts to close tuberculous pulmonary cavities by means of prolonged endocavitary aspiration were first reported in July, 1938, by Dr. Vincenzo Monaldi<sup>1</sup> of the Forlanini Institute of Rome. Continuing this research, which was more fully detailed in subsequent articles,<sup>2-7</sup> he and his pupils have now performed the procedure upon over 150 patients, with remarkably good results.

The Monaldi procedure begins with careful selection of suitable cases, after repeated unsuccessful attempts to induce artificial pneumothorax prove that the pleural leaves are firmly adherent, especially in the area where the puncture is to be done. The cavity is exactly localized by means of x-ray. The puncture proper is done under procain anesthesia, employing a special Y-shaped cannula with a trocar, with which, under manometric control, a soft rubber catheter is introduced through the chest wall into the cavity. A suction pump is attached to the catheter. The suction is kept up continuously or intermittently for weeks or months, depending upon the behavior of the cavity.

Cavity aspiration differs from the surgical procedures generally used in the treatment of pulmonary tuberculosis in that it does not depend upon compression of lung or cavity, but rather upon reexpansion of the lung to fill in the excavated portion. This may be accomplished by re-aeration and reexpansion of atelectatic tissue, by reabsorption of alveolar exudate and consequent recovery of elasticity of the tissues involved by the exudation, and by compensatory emphysema of normal pulmonary tissue in the vicinity of the cavity or even in more distant parts of the lung. These mechanisms are favored by the establishment of a negative pressure within the cavity. Another result of the treatment is the drainage of pus, blood and bits of necrotic tissue, with their high bacillary content, bringing about, so to speak, a sterilization of the cavity. Sputum conversion and disappearance of cavity, with improvement in the patient's general condition, are reported in a large proportion of the cases.

The presence of homolateral tracheobronchial disease is not a contraindication; on the contrary,

a partially occluded bronchus is an aid to obtaining negative suction within the cavity. Since there is little operative reaction the puncture can be done on toxic, febrile or older patients, and in the presence of progressive contralateral disease. It has been performed in conjunction with collapse measures on the same and other side, even with homolateral pneumothorax, when limited to a part of the lung distant from that operated upon.

Other direct therapeutic approaches to tuberculous cavities previously attempted have included open surgical drainage,<sup>8</sup> insertion of metal trocar or needle, leaving it *in situ* with no suction or short periods of suction,<sup>9</sup> endobronchial aspiration,<sup>10</sup> plugging of bronchi by means of bronchoscopy,<sup>11</sup> and cautery of bronchus with intent to create stenosis, using a thoracoscope introduced into the cavity.<sup>12</sup> The results of cavity aspiration in the cases begun at the Olive View Sanatorium since September, 1939, have, so far, been promising.<sup>13</sup>

Olive View Sanatorium.

EDWARD KUPKA,  
Olive View.

<sup>8</sup> De Cereville, Tuffier, Eloesser, Haight, and others.

<sup>9</sup> Eloesser, L.: Blocked cavities in pulmonary tuberculosis, *J. Thoracic Surg.*, 7: 1-22 (Oct.), 1937.

<sup>10</sup> Brooks, W. D.: *British Journal of Tuberculosis*, 32: No. 14, 1938.

<sup>11</sup> Vorwald, A. J., and Adams, W. E.: *Journal of Thoracic Surgery*, 3: No. 2 (August), 1934.

<sup>12</sup> Coryllos, Pol. N., and Ornstein, G. G.: Giant tuberculous cavities of lung; pathogenesis, pathologic physiology, and surgical treatment, *J. Thoracic Surg.*, 8: 10-54 (October), 1938.

<sup>13</sup> Kupka, E., and Bennett, E. S.: *American Review of Tuberculosis*, 42: No. 5 (November), 1940.

*Journal Recommends Nurses' Schools Should Teach Industrial Hygiene.*—Courses in industrial hygiene for undergraduate and graduate students should be started at once by schools of nursing, *The Journal of the American Medical Association* declares in an editorial which points out that with the speeding up and intensification of industry now taking place in connection with the national preparedness program many more industrial nurses will be needed than are now available.

"Competent industrial health service depends on the availability of physicians adequately trained in industrial medicine, hygiene and traumatic (injuries) surgery," *The Journal* says. "Ordinarily, however, assistance is necessary from other properly qualified professional personnel. Industrial medical departments provide excellent opportunities to nurses with proper aptitude, good comprehension of public health nursing methods and a sure sense of their own professional limitations. A clinical and administrative assistant of this character will be of immense aid to any industrial physician in the performance of many routine functions which make up the bulk of industrial dispensary procedure.

The system works admirably under whole-time industrial physicians or under part-time physicians who spend regular visiting hours at a plant. In the absence of direct medical supervision, written standing orders, properly posted in the plant medical unit, will do much to inhibit assumption of services which require expert medical attention. Some form of medical supervisory arrangement is necessary to provide nurses with technical advice. The physicians on call for first aid and compensation work may be most helpful, particularly if they have some insight into the actual working environment."

The body requires mineral elements for growth, repair and regulation of body processes.

<sup>1</sup> Monaldi, V.: *Lotta contro la Tuberculosis*, 9: No. 9 (Sept.), 1938.

<sup>2</sup> Monaldi, V.: *Annali dell'Istituto Carlo Forlanini*, 2: No. 10 (October), 1938.

<sup>3</sup> Monaldi, V.: *La Settimana Medica*, 17: No. 8 (March), 1939.

<sup>4</sup> Monaldi, V.: *Annali dell'Istituto Carlo Forlanini*, 3: No. 8 (March), 1939.

<sup>5</sup> Monaldi, V.: *Zeitschrift für Tuberkulosis*, 82: No. 6 (May), 1939.

<sup>6</sup> Lloveras, J. Argemí: *Medicina Española*, 2: No. 6 (April), 1939.

<sup>7</sup> Jimenez, Miguel, *El Tratamiento de la caverna pulmonar tuberculosa por la aspiración endocavitaria*, *Rev. mex. de tuberc.*, 1: 5-16 (July-August), 1939.

# ORIGINAL ARTICLES

## CHANGING CONCEPTION OF CORONARY ARTERY DISEASE\*

By JOHN J. SAMPSON, M. D.  
San Francisco

WITHIN the memory of most of us the concepts of the pathogenesis, the functional and structural pathology, and the clinical characteristics of coronary artery disease, have undergone remarkable changes. The disease was first recognized in the latter part of the eighteenth century. Heberden gave the original description of angina pectoris in 1786. Harvey described myocardial infarction with cardiac rupture in his report on the heart of George II. Fothergill in 1776, and Black, Jenner and Parry (John Hunter's heart), as well as Baillie at the beginning of the nineteenth century, discussed coronary arteriosclerosis in relation to angina pectoris. In 1809, Burns of Glasgow compared the pain in this condition to that experienced in an extremity below a ligated artery. Earlier descriptions of the lesions had been given by Drelincourt, Thebesius, and Bellini. Kreysig in Germany and Testa in Italy made further contributions to the subject in the middle of the nineteenth century, but Laennec and many clinicians after him slowed progress by asserting that angina pectoris was a nervous disease. In 1842 Marshall Hall associated coronary artery disease with sudden death, and Ericson was the first to produce sudden death experimentally by ligating the coronary arteries of dogs. Virchow demonstrated the phenomenon of coronary embolism, and Weigert, in 1882, described the infarction followed by blocked coronary arteries in man. René Marie in 1896, Sternberg<sup>1</sup> in 1914, and others in the interval, gave excellent pathological descriptions of coronary infarction.

### THEORIES CONCERNING PATHOLOGY

Cohnheim and von Schultness-Rechberg,<sup>2</sup> in 1881, made the assertion that, functionally, the coronary arteries were end-arteries. This viewpoint was supported by Wiggers,<sup>3</sup> Porter,<sup>4</sup> Saphir, Priest, Hamburger, Katz<sup>5</sup> and others, and more recently by Blumgart, Schlesinger and Davis.<sup>6</sup> In conflict with this conception was the early demonstration of coronary interarterial communication by Ruysch in 1704 and Lower in 1728, which was confirmed by many workers, including such recent workers as Gross,<sup>7</sup> Hirsch and Spalteholz,<sup>8</sup> and Spalteholz and Campbell,<sup>9</sup> who believed that these communications were functionally adequate. Pratt,<sup>10</sup> and later Wearn and his associates,<sup>11,12</sup> and others demonstrated the possible functional communications of the "Thebesian" system<sup>12</sup> with the coronary arteries and capillaries, and as early as 1880 Langer<sup>13</sup> had demonstrated the collateral supply to the coronary system from the extracardiac vessels of the pericardium, the bronchi, the

diaphragm, and the great vessels. The history of the clinical appreciation of acute coronary artery occlusion began with the work of Hammer<sup>14</sup> of St. Louis in 1876, who first made the bedside diagnosis. However, it remained for Dock<sup>15</sup> in 1896, Abrotzow and Strachsika<sup>16</sup> in 1910, and Herrick<sup>17</sup> in 1912 to define the criteria for diagnosis of this condition, or, more precisely, of acute myocardial infarction.

Although most of the important pathological and experimental conditions found in coronary artery disease had been described, the practicing physician at the beginning of the twentieth century still was confused by the varied opinions on the causes of angina pectoris and of so-called chronic myocarditis with heart failure. The pain of angina pectoris may in rare instances not be due to coronary artery disease; however, this condition is now generally accepted to be its cause. Sir Clifford Albutt and others, by supporting the "aortic" theory of angina pectoris, slowed the popular acceptance of such ideas. Although more complete details of the clinical picture of acute coronary artery occlusion appeared in the literature during the first two decades of this century (for instance, Libman and Sacks<sup>18</sup> reported leukocytosis and Fred M. Smith<sup>19</sup> the alterations in the electrocardiogram), the diagnostic criteria were not generally known and the frequency of the occurrence of the disease was not recognized. Until the beginning of the third decade the diagnosis was rarely made, and the criteria were not even taught in the medical schools of America and Europe. What gave the tremendous impetus to the recognition of this lesion as the commonest nonaccidental cause of sudden death in man is not known. Perhaps the repeated articles of Herrick and of Levine were responsible. The diagnosis of acute indigestion commonly made during and prior to the early 1920's is practically unknown today, since in most of the cases formerly so diagnosed we now find acute coronary artery occlusion with infarction.

### CHART I

Chart 1 outlines the findings in a case of acute coronary artery occlusion eleven years after Herrick's<sup>17</sup> description, with which this case is compared. It illustrates that even a typical case observed by several prominent physicians as late as 1922 was diagnosed erroneously. From 1925 to 1930 the knowledge of the diagnostic criteria rapidly infiltrated this country, and by the beginning of the fourth decade the characteristic picture of acute coronary artery occlusion was well recognized. Likewise, the conception that angina pectoris is a disease almost exclusively due to anoxia of the myocardium, as restated in the article of Keefer and Resnik,<sup>20</sup> was accepted by most physicians.

The first demonstration of the value of the electrocardiogram in the diagnosis of acute coronary artery occlusion was made by Fred M. Smith<sup>19</sup> in 1918, when he compared the records of dogs with ligated coronary arteries with those of patients who had coronary artery occlusion. Pardee<sup>21</sup> in 1920 demonstrated the significance of the S-T interval and the T-wave changes; Wolferth and Wood<sup>22</sup> in 1932 indicated the diagnostic im-

\* From the Department of Medicine, University of California Medical School, San Francisco.

Read before the general meeting at the sixty-ninth annual session of the California Medical Association, Colorado, May 6-9, 1940.

CHART 1.—Comparison of Case of Mr. X With Herrick's Case 1

Case 1—1912—aet. 55	Mr. X—1923—aet. 58*
1. One hour after meals —pain in lower pre-cordial region. Fairly abrupt onset. Occurred at rest.	1. Distress. ?Lower chest and epigastrium during night after dinner. Fairly abrupt onset. Occurred at rest.
2. Nauseated and induced vomiting. Later projectile vomiting.	2. Nauseated. Vomiting.
3. Pain persisted 3+ hours.	3. Pain through night and recurred through second and third days. Cleared fourth day.
4. Exhaustion —. Weak pulse.	4. Exhaustion during second day. Circulatory collapse third, fourth and fifth days.
5. Cold with sweating +.	5. Cold with sweating +.
6. Moist râles right and left chest. ?cough. ?rapid respiration.	6. Moist râles right and left chest. Cough +. Respiration 40. Cheyne Stokes respiration.
7. Fever second day.	7. Fever, second and sixth days to 102°. Cleared by sixth day.
8. Moderate cyanosis.	8. ? cyanosis.
9. Tachycardia 140.	9. Tachycardia 120-130.
10. Despite weakness able to undertake physical activity. Mind clear.	10. Very active first day and never at complete rest for two and one-half days. Mind clear.
11. Sudden death in fifty-two hours.	11. Sudden death on sixth day.
12.	12. Previous history of hypertension and angina pectoris.
13.	13. Sister died suddenly of similar disease. ? other family members.
14.	14. Leukocytosis.
DIAGNOSIS: (?) Hypertension. Coronary arteriosclerosis. Acute coronary artery occlusion with infarction. Sudden death.	Hypertension. Angina pectoris. Acute G. I. attack. Crabmeat-copper ptomaine poisoning. ? Gall-bladder disease. Pneumonia. Circulatory collapse. Apoplexy.

\* From official medical bulletins.

portance of Lead IV; and Wilson, McLeod, Barker and Johnston<sup>23</sup> were the first to report the localization of certain lesions by the characteristic "Q1-T1" and "Q3-T3" forms of the electrocardiogram. However, excellent reviews by Wilson<sup>24</sup> and others have shown that many causes other than acute coronary artery occlusion may produce approximately the same electrocardiographic abnormalities. Therefore, in spite of the recognized importance of electrocardiographic criteria, characteristic changes in the records cannot be accepted as pathognomonic of this condition.

By the middle of the fourth decade the diagnosis of "acute indigestion" had almost disappeared, and coronary artery occlusion was recognized not only by the physician, but also by the lay public. A trend toward overdiagnosis of coronary artery occlusion

rapidly followed. Among the conditions falsely diagnosed as such were: acute abdominal disease, dissecting aneurysm of the aorta, acute pulmonary artery occlusion, pleurisy, nerve root pain, spontaneous pneumothorax, esophageal and mediastinal diseases, and the onset of diabetic coma.

#### PHYSIOLOGIC RELATIONSHIPS

The excellent experimental work of Anrep,<sup>25</sup> Wiggers and Cotton,<sup>26</sup> Katz, Weinstein and Joachim<sup>27</sup> and others on the physiology of the coronary circulation demonstrated the importance of aortic pressure in maintaining adequate blood flow and the constricting influence exercised by the contracting cardiac muscle on the coronary vessels. The earlier end-artery hypothesis had been discarded. Attention was directed to the existence of collateral circulation by the injection studies of Gross,<sup>7</sup> Spalteholz and Campbell<sup>8</sup> and others, and this in turn led to the efforts of Beck<sup>28</sup> and O'Shaughnessy,<sup>29</sup> in the late 1930's, to establish artificial collateral circulation through extracardiac tissue grafts. Prior to this time (and even up to the present) surgical procedures for the relief of angina pectoris were directed toward interrupting the nervous pathways, chiefly those of the afferent cardiac nerves. The assumption was that by this method the unbalance between the demand of the cardiac muscle for oxygen and its available supply might be corrected. Blumgart, Levine, and Berlin<sup>30</sup> introduced the practice of thyroidectomy as a therapeutic measure. When symptoms of anginal or congestive failure could not be relieved by placing the body at relative rest, they attempted to reduce the work of the body still further by lowering the metabolic demands on the heart for the delivery of blood. Only moderate success was achieved.

#### PROGNOSIS

The extremely grave prognosis attributed to coronary artery occlusion at the time of its first widespread recognition has been modified gradually until, at the close of the fourth decade of this century, only 15 to 25 per cent fatality was attributed to the first attack of myocardial infarction. However, there did seem to be an alarming rise in frequency of the condition as well as of all coronary artery disease. Cohn<sup>31</sup> and others showed that this was probably due largely to (1) the survival of persons into the age of senescence who formerly succumbed to infections such as typhoid fever (which are now relatively infrequent) and (2) the changing habits of diagnosis and diagnostic terminology of the general medical practitioners.

#### OTHER STUDIES

The apparent increase in coronary arteriosclerosis awakened medical and public consciousness especially to the frequency of cases occurring before the age of fifty years, and resulted in attempts to determine the pathogenesis of such arteriosclerosis. The earlier experiments of Ignatowsky<sup>32</sup> in 1908, in which he produced arteriosclerosis in herbivora by feeding cholesterol, have been supplemented recently. Likewise, by comparing the dietary habits of these animals with the relative dietary habits of different groups of men, Leary,<sup>33</sup> Joslin,



Root, White and Marble,<sup>34</sup> and others concluded that ingestion of cholesterol in eggs, cream and similar foods may play an important part in causing atherosclerosis in man. These conclusions were strengthened by reports such as those of Thomas<sup>35</sup> and Aschoff<sup>36</sup> on the effect of low-fat diets during the World War, 1914-1918, in reducing the incidence of arteriosclerosis in Germany, and of Oppenheim<sup>37</sup> on the occurrence of marked arteriosclerosis in only 11 per cent of the Chinese in Shanghai, whose diet is low in dairy products. Another means of studying this condition is provided by the fact that ordinary clinical atherosclerosis resembles xanthomatosis associated with cholesterolemia. Muller<sup>38</sup> reported this condition in seventy-six persons, and indicated that its occurrence is much more common than was previously believed. In spite of such positive evidence, the relation of foods to arteriosclerosis in man is not generally considered as conclusively proved.

Hypertension is a known cause of arteriosclerosis, but its cause in turn is still unknown, although much work on constriction of the renal artery has been done by Goldblatt<sup>39</sup> and others, which indicates that restricted blood flow through the kidneys produces a hypertensive substance. Diabetes is, likewise, a common cause of premature arteriosclerosis.<sup>34</sup>

Surveys of the racial characteristics and habits of man, made by Glendy, Levine and White,<sup>40</sup> indicate that the pace of modern life may produce premature arterial degeneration, especially in the emotionally high-pitched races. This tendency is known to be inherited chiefly through the mother, and coronary and generalized arteriosclerosis may be on the increase in young persons. Furthermore, tobacco is suspected of causing premature arteriosclerosis in man, although no confirmation of this belief has been universally accepted.

Diseases other than typical arteriosclerosis, recognized as being rare causes of coronary artery narrowing, are: Buerger's disease, xanthomatosis (previously mentioned), periarteritis nodosa, rheumatic or syphilitic arteritis, gummata, neoplasms and unspecified types of thrombotic diathesis.

#### PRESENT STATUS

As we enter the fifth decade of the twentieth century we find that some of the work of the past fifteen years fits into the mosaic of current opinion. The experimental work on dogs by Beck<sup>28</sup> in 1932, and Burchell<sup>41</sup> in 1940, demonstrated that artificial collateral circulation developed only when the coronary arteries were constricted, and thus confirmed the assumption of Hudson, Moritz, and Wearn<sup>42</sup> that a similar situation existed in the diseased coronary vascular system.

From such work as that of Kountz and Smith<sup>43</sup> on perfused revived human hearts, we conclude that if the blood supply is rapidly diminished to an inadequate flow, infarction may be produced without occlusion of a coronary artery. Gross and Sternberg<sup>44</sup> and others have shown that infarction may occur as a result of increased demand for blood by the cardiac muscle even without extensive narrowing of the coronary arterial aperture. The

probable improvement in oxygen supply to the myocardium by favorably changing the circulatory mechanisms in certain persons with postural defects and emphysema was accomplished by Kerr, Cannon, and Lagen<sup>50</sup> through the use of abdominal belts. They demonstrated not only clinical improvement in patients with angina pectoris, but likewise improvement in certain tests of circulatory efficiency, such as measurement of the circulation rate. Careful pathological and clinical correlations culminating in the recent studies of Blumgart, Schlesinger, and Davis<sup>6</sup> have confirmed that this rapid development of unbalance between demand and supply of blood, which produces infarcts, and patchy myocardial necrosis, is caused by a slowly developing inadequacy of the blood supply of the myocardium. They have also demonstrated the remarkable development of collateral circulation in good-sized vessels (over 40 in diameter) on the gradual narrowing of the regular channels, so that often complete occlusions are observed at autopsy in hearts in which no clinical picture of acute infarction had been noted. Usually two or more occluded vessels result in symptomatic anginal or congestive failure.

#### CHART 2

Chart 2 is given to summarize briefly the elements tending to affect unfavorably the balance of myocardial demand for oxygen and the available supply. Some of these factors have been discussed previously in this paper. If somewhat broad conclusions are drawn from these data, the occurrence of a "silent" coronary artery occlusion would be suspected on the sudden development of angina pectoris or congestive heart failure without other cause. This condition is estimated by certain workers to occur one and one-half to two times as frequently as the occlusions producing the characteristic clinical picture of myocardial infarction. The suggestion follows that, in order to prevent the increase of oxygen demand by the cardiac muscle, patients should be kept quiet when such occlusion is suspected until adequate collateral circulation has developed. The demonstration that collateral circulation develops slowly with demand likewise explains occasional slow spontaneous "cures" in cases of angina pectoris. Thus we must now recognize not only that coronary occlusion induces myocardial infarction, and that myocardial infarction may occur without coronary occlusion, but also that either or both of these conditions, when they occur slowly, may produce the characteristic clinical picture of angina pectoris or congestive heart failure in contrast to the clinical findings which appear with the abrupt development of a myocardial infarct.

Winternitz, Thomas, and LeCompte<sup>45</sup> have described subintimal hemorrhages in the coronary arteries which precede occlusion, having been caused by rupture of one of the extensive groups of vessels adjacent to the atheromatous deposits in the arteries. These hemorrhages may explain the occurrence in about 50 per cent of all cases of acute coronary artery occlusion, of a warning premonitory pain which is felt for several hours

CHART 2.—*Concept of Coronary Circulatory Efficiency Balance Between Myocardial Demand for Oxygen and Available Oxygenated Blood.*

**Factors Disturbing Balance:**

**I. Fall in coronary artery pressure.**

1. Coronary artery disease or congenital anomalies.
2. Fall in aortic mean blood pressure—aortic insufficiency and stenosis, and congestive heart failure and shock (i. e., surgical). Fall in blood volume or mechanical defects in return of blood to heart.
3. Tachycardia.
4. Hypertension—increased perivascular muscle pressure—inadequate capillary supply.
5. Reflexes causing coronary artery spasm—abdominal disturbances, gall-bladder disease, psychic factors, cold, etc.

**II. Increased demand without adequate increased supply of blood.**

1. Hypertrophy of myocardium.
2. Valve lesions and hypertension increasing work.
3. Hyperthyroidism or thyroid administration.
4. Epinephrin—through more forceful contraction and increased peripheral arterial pressure.

**III. Oxygen content of the blood.**

1. Anemia.
2. Anoxic anoxemia, i. e., high altitude, poor pulmonary aeration of blood, veno-arterial shunts, and carbon monoxide poisoning.

**IV. Drugs and toxins affecting coronary artery lumen, i. e., pitressin.**

**V. Inadequate collateral circulation.**

A trend toward adequate collateral circulation develops when pressure in a collateral vessel is higher than in the distal portion of the occluded or narrowed artery. Infarction develops if such circulation is not available when a major inadequacy of blood suddenly occurs. Congestive heart failure and angina pectoris develop when the collateral circulation is relatively inadequate, and with a slow development of this blood supply such evidences of failure are often accompanied by the occlusion of one or more coronary artery branches, even though the signs and symptoms of acute infarction have not developed.

to several days before the occlusion takes place (Feil<sup>46</sup> and Sampson and Eliaser<sup>47</sup>).

**WORK FOR THE FUTURE**

As we look into the future, we are confronted with certain problems that are worthy of statement and conjecture. We must look broadly at every case of angina pectoris or congestive heart failure caused by coronary arteriosclerosis. We must consider the transient or permanent factors which cause relative oxygen insufficiency of the cardiac muscle. We must attempt by the examination of clinical histories and laboratory and electrocardiographic criteria to determine what factor or factors have brought about the condition. With greater clinical acuity we should be able to detect most cases of "silent" coronary occlusion, as well as those of slowly or rapidly developing infarction which do not present characteristic clinical patterns. The future treatment of such cases will be advantageously modified only by our increasing ability to diagnose these pathological changes. We hope that a new study of criteria will be made which will enable us to determine just how completely the collateral circulation has developed and how extensively the natural circulation has been impaired.

According to the recent work of Mallory and his associates,<sup>48</sup> structural recovery of small infarcts takes place in two weeks, that of large infarcts in five weeks; no cardiac rupture ever occurs after the second week. Perhaps many of our patients with characteristic infarction are being confined too long. On the other hand, many patients may require the prolonged limitation of activity which we have given only to those with the characteristic syndrome of acute coronary infarction as clinically recognized. It has been shown that mortality is higher, and dilatation and thinning of the infarcted areas occurs more readily in dogs with experimental infarction that are allowed free activity than in those that are confined for six days after the occlusion.<sup>49</sup> This is added evidence in support of the rest treatment of myocardial infarction.

**CALIFORNIA HEART ASSOCIATION AND OTHER AGENCIES**

Not only private investigators, but also the United States Public Health Service and various health departments throughout the country are taking cognizance of both rheumatic heart disease and coronary heart disease as major public health problems, and are making efforts to eliminate them. Certain special activities of the American Heart Association may prove valuable in this public health crusade. This organization has recently attempted through a questionnaire to assemble and to analyze critically the widespread individual experiences of over two hundred physicians in regard to the course, treatment, and results obtained in cases of coronary artery sclerosis. These data should aid in evaluating the present methods of caring for patients with this disease. The California Heart Association is undertaking surveys on the incidence of heart disease, and also is making efforts to analyze the influence of industrial strains on hastening its advance. It is also sponsoring studies of the socio-economic problems arising in the adjustment of such cardiac patients to employment.

That so little has been accomplished to date in decreasing the incidence of arteriosclerosis among the general populace is no reason why we should consider the outlook as hopeless. It may be safely predicted that the concerted efforts of the individuals and agencies working in this field will bring about a decrease in the incidence of coronary artery disease, especially in persons of the fourth and fifth decades of life, and will result in the prolongation of the life span of those now suffering from it.

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## FIBROMA OF THE NASOPHARYNX\*

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AND

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Fresno

ALTHOUGH fibroma of the nasopharynx is of rare occurrence—about one in 164,000 ear, nose, and throat cases—we need generally disseminated information concerning it; otherwise, it is a real emergency when we meet it, and, as treatment has evolved in recent years, we think it worth while to write of it at the present time.

Nasopharyngeal fibroma is usually spoken of as histologically benign, but clinically malignant. Ferreri, quoted by Clark,<sup>1</sup> says that "true pharyngeal fibroma has its origin in the aponeurosis of the sphenoid occipital recesses, and sometimes attains enormous size, and by anatomical interference, may produce pressure disturbance, sometimes quite serious, occlude the upper respiratory passages, or penetrate the skull and produce symptoms of hypophyseal tumor." It may penetrate the skull through the cribriform plate of the ethmoid bone, or through the pharyngeal vault by way of the sphenoid sinus.

They are attached very firmly to the occipital and sphenoid bones and, as they grow, become firmly joined to the choanal region, and to any bone with which the growing tumor comes in contact, in addition to that of the area in which the growth began.

The nasopharyngeal fibroma is always formidable because of the difficulty of controlling the hemorrhage after the initial steps of operation have started bleeding, but before sufficient excavation can be made to approach the region from which the hemorrhage comes.

Nasopharyngeal fibroma occurs about fourteen times as often in boys as in girls, the great majority of them when they are between thirteen and sixteen years of age. About 21 per cent have occurred at fifteen years of age. The average age has been older in those few occurring in females. As the ossification between the sphenoid and occipital bones is completed by twenty-five years of age, the change in circulation then probably accounts for the fact that these tumors sometimes shrink away after twenty-five.

### DIAGNOSIS

As to diagnosis, there is constant and increasing nasal obstruction. A polyp has a typical color and is easily movable, while fibroma is more nearly the normal tissue color and very firm. It cannot be pushed about, and it usually has a sessile base; often with a history of recurrent and profuse nose-bleed. Though it be small, it can usually be seen with a mirror in the nasopharynx; if large, it can easily be palpated. It usually projects into the nasopharynx far enough to be easily seen. It may bulge the soft palate forward, and may extend into the oropharynx, one case in the literature being mentioned which extended into the esophagus.

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A projection, or projections, often extend forward into one nostril, in which event, the septum is crowded to the opposite side. In some instances multiple projections crowd, sometimes into both nostrils, while some have grown into the antra, sphenoid sinus, or in other directions. Oftentimes, there has been so much hemorrhage that the patient is pale and poorly nourished. The color of the fibroma is more nearly normal than that of a malignant growth. A biopsy ordinarily aids in eliminating malignancy. After biopsy, packing may be necessary to stop bleeding.

The usual sessile base and toughness of the tissues of the tumor make separation of it from the tissues to which it is attached very difficult. These tumors usually have, running near the surface, large, cavernous blood vessels which have no contractile walls, making bleeding profuse and hard to control. There is sometimes ulceration, caused by pressure during rapid growth of the tumor. Rapid growth may spread the bones of the face when growing out through the nostril, or crowd the orbit and its contents.

#### TREATMENT

The history of early surgical removal of nasopharyngeal fibroma, before the days of irradiation treatment, gave very discouraging results in a large percentage of cases because of fatal hemorrhage, sepsis, pneumonia, and shock. Lateral rhinostomy, resection of the hard palate, ligation of the external carotid and jugulars, and tracheotomy, were some of the preliminary operations attending early efforts at removal of the growth.

These tumors are very resistant to instrumentation. Forceps of a size that can be introduced into the nostril snap off without much effect, except to produce free bleeding, hard to stop.

#### OPERATIVE PROCEDURES

Lynch<sup>3</sup> mentioned that, in operating, if the tumor can be gotten free at the base, hemorrhage can be much better controlled than if the operation began in the distal part of the tumor. That is a fact, and, probably, because the blood vessels have their normal walls before they enter the tumor at its base and, when severed, will close better than the cavernous type running over the surface of the tumor; so we think surgical removal should begin, if possible, in the nasopharynx. After removal of that part, the part in the nostril, if any of it is there, may be removed later with much less hemorrhage than if one begins biting the tumor away through the nostril first.

Splitting of the soft palate, from the uvula through the median raphe to the hard palate, gives an easy view of the tumor, and the opportunity to begin the operation at its base. Also, we feel we would have no hesitation in resorting to this for the purpose of placing radium needles. They could thus be placed by direct view, and the large blood vessels, and very troublesome hemorrhage could be avoided.

The soft palate can be sutured at once. The stitches will hold it in anatomic position, without any stretch. It repairs at once, and without defect in function. We would not want to leave it un-

sutured any length of time, as atrophy separates the borders widely, and it would be more hard to attain the best results in late closing. However, the degree of exsanguination of the patient might cause one to alter the course.

Keith<sup>4</sup> in 1925, Martens<sup>5</sup> in 1927, Pryor<sup>6</sup> in 1935, and others at various dates, have described the use of irradiation treatment, and the results of treatment have been so much better than the average described in the literature before irradiation, that we think it should be done before any surgery.

By the use of radium the blood vessels in these tumors are changed, probably causing an endarteritis, with the result that the operative hemorrhage is far less bad, and the texture of the tumor is changed so that it is not nearly so resistant to instrumentation.

In some of the cases in the literature, surgery was not required after radium, or radium and x-ray treatment. Keith and Keith<sup>4</sup> used radium, followed by x-ray treatment over a period of eight days. Six days after radium treatment there was marked improvement, and the beginning of a ravenous appetite. Their patient, over six feet tall, weighing 85 pounds, gained 13 pounds in weight in the next ten days and soon weighed 145 pounds. Two months after the treatment there was no evidence of the tumor remaining, although it had been one of the worst growths as to obstruction and exsanguination, and great pain, requiring six one-quarter grains of morphin a day for relief.

Some have advised 50 milligram hours of radium to be used for each cubic centimeter of tumor tissue. Some have used more, up to a total of about 1125 milligram hours. If the degree of exsanguination does not cause some other course to be followed, we think irradiation before any surgery the procedure of choice. We think no less than 400 to 1000 milligram hours should be used. Some have mentioned using small amounts, such as about 15 milligram hours, and have been skeptical about irradiation. We think that it would not be very valuable if only that amount were used.

After using irradiation two or three times in the proper manner, the tumor is much more easily operable. It may be grasped by a large forceps in the nasopharynx, and some have succeeded in rocking it loose at its base. It may be cut loose there, and as well forward toward the choanae as possible, by curved chisels or knives, or electrosurgery, and the nasopharynx packed to control bleeding; then that in the nostril, if present, removed by biting forceps or chisel in one's hand, not driven by the use of a hammer.

Mention is made in the literature of recurrence after surgical removal. We think radium needles placed in any recurrence the best method to complete the removal. If only a small remnant of tumor tissue is present, the amount of radium and time of application would need to fit.

#### REPORT OF CASES

CASE 1.—A. C., age 20, a thin, undernourished young man, in December, 1935, complained of nasal obstruction, gradually growing worse in the past year, recurrent nasal hemorrhage and profuse nasal discharge. A firm tumor was found present, almost completely closing the left

nostril. The main body was attached by a broad base in the vault of the nasopharynx. It projected down into the nasopharynx to near the border of the soft palate. It resisted any effort at removal with punch forceps that could be introduced through the nose, and was intensely bloody. The pathological report after biopsy called it fibroma.

For the purpose of making it softer and less bloody, we used 800 milligram hours of radium, screened with silver and rubber, and held in place by a postnasal pack, being placed as well as could be over the tumor where it was accessible, externally, above and over much of its area where it could not be reached with radium tubes. A month later, where the radium had been applied, there was a gray membrane, and the tumor had shrunk away to probably about one-third of the size it was at the time of the first examination. Its texture was then such that it was much more easily cut and was removed surgically, first from the nasopharynx, then from the remainder from the nostril. It was much more accessible than at first, as a result of shrinking from irradiation.

Subsequent examinations in the following year revealed normal function, normal health, and no recurrence.

We would now prefer to apply the radium in needles, rather than in tubes.

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CASE 2.—D. V., age 15, consulted us on January 11, 1936, for nasal obstruction and recurrent hemorrhage. The septum was badly deflected, especially at the back. This patient did not tolerate postnasal examination well. The tumor was not as large as that in Case 1, so we did not discover it until after we did a septum resection on January 17. At septum resection, a very solid tumor was found occupying the whole of the left side, and most of the right, of the nasopharynx. It was attached firmly, by a sessile base, to the sphenoid-occipital junction, and forward at the choanal region. After biopsy we placed radium about the tumor, and on February 29 removed the remnant surgically.

There was no recurrence when the boy was last examined in December, 1936. There was a good postnasal space. He had changed from a frail creature to quite the opposite.

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CASE 3.—L. V., an emaciated, pale boy, age 12, referred by Dr. John R. Fillmore, consulted us in April, 1939, suffering from extreme nasal obstruction, profuse discharge, and recurrent hemorrhage. Doctor Fillmore had discovered a nasopharyngeal growth. It was a typical nasopharyngeal fibroma. It blocked the left nostril, extending to about the middle of its length, pushing the septum far to the opposite side.

Postnasal inspection revealed a tumor filling nearly all of the nasopharynx, extending down almost to the lower border of the velum. The soft palate was bulged forward by pressure. It bled easily from the least touch. It was attached to the septum, the hard palate, the middle and lower turbinates, and pterygoid region. In the nasopharynx it was attached to the base of the sphenoid and occipital bone.

This boy was suffering intensely from hay fever. Radium application was suggested, but not used until June 3, when about 850 milligram hours were applied. At operation on June 29, we split the soft palate, and grasped the tumor with a large Brandegee adenoid forceps, then cut it away from its attachment at the base by use of the curved chisel and diathermy knife and desiccated some bleeding points. Postnasal bleeding persisting still, it was controlled by packing, which was retained by being tied forward through the right nostril; then the remnant was removed from the left nostril by forceps, chisels, and electrosurgery.

After pollen desensitization, this boy has gained in weight and grown nicely, and has good nasal function and has had no recurrence of the growth to date.

#### COMMENT

In the ear, nose, and throat department of the Los Angeles County Hospital, in the service of Dr. J. McKenzie Brown,<sup>7</sup> a case was shown at a recent College of Surgeons' meeting. Profuse

hemorrhage had been a serious threat to this patient before irradiation and removal of the tumor. There apparently had been an excellent result in their treatment of the case, although the condition was very desperate when treatment was begun, several transfusions being necessary to save the boy's life.

Our first two cases came within two months' time, although the three are all we have encountered. After a wider experience in the use of radium, we think 1000 milligram hours of radium placed by needles under the surface, or in small rubber tubing, properly placed, safe and effective.

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#### COCCIDIOIDOMYCOSIS\*

##### RELATIVE VALUES OF COCCIDIOIDIN AND TUBERCULIN TESTING AMONG CHILDREN OF THE SAN JOAQUIN VALLEY

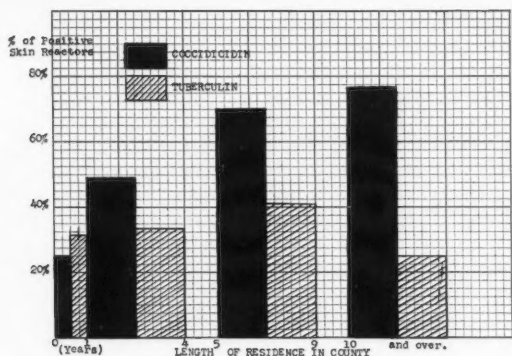
By JULIET E. THORNER, M. D.  
Bakersfield

OUTSIDE of the San Joaquin Valley—where coccidioidomycosis may be said to be endemic—the disease, caused by inhalation of the vegetative form of the fungus (the severe granuloma as well as the commoner and more benign form, called "valley fever"), is relatively uncommon.

The employment of the coccidioidin skin test as a case detector was not used on a large scale in this vicinity until 1936, after the initial work of Gifford,<sup>1</sup> who first suggested that there might exist a significant relationship between the incidence of erythema nodosum as it occurs in the San Joaquin Valley, and the coincident discovery by the County Public Health Laboratory staff of the double-walled spherules, characteristic of the fungus in the sputa of some of these patients. Gifford noted in all instances of erythema nodosum associated with the fungus involvement of lung and mediastinal tissue that the coccidioidin skin test was markedly positive.

The work of Dickson<sup>2a</sup> served to further clarify the disease entity now named by him "Coccidioidomycosis—primary inspiratory type," and to distinguish between the two forms of the disease,

\* This study was aided through the Rosenberg Foundation, San Francisco, California.



namely, the commoner and benign form, with or without erythema nodosum, but associated with pulmonary symptoms and the recovery from the sputum of double-walled spherules characteristic of the *Oidium coccidioides*. Contrasted with this is the progressive and more malignant granuloma form of the same disease, with its protean manifestations, and with which the medical profession is more familiar.

The research work of these investigators served to stimulate interest, particularly among local physicians, in noting the prevalence of both forms of the disease in this valley.

Just as the tuberculin test has been in use for a number of years among diagnosticians as a case and contact detector, so the coccidioidin test has been employed here in the past four years in an effort to determine the percentage of infected individuals residing in this vicinity.

Wallgren<sup>3</sup> was among the first to point out the fact that in primary tuberculosis of pulmonary origin the appearance of erythema nodosum heralds the time when the bacillus has completed its first stage of tissue invasion; a point where tissue sensitivity to the tuberculin is supposedly at its highest. A comparable tissue allergy seems to exist in instances of erythema nodosum associated with infection by the coccidioides *Oidium*. The skin test of one patient reported by myself<sup>4</sup> in an earlier paper having been negative at the onset of the illness, became markedly positive nine days later when the erythema nodosum was at its height, and at which time the endospore-forming form of the fungus was recovered from the sputum.

Because of the clinical as well as the roentgenological similarity between early coccidioidomycosis and primary pulmonary tuberculosis, and the significance attached to positive Mantoux reactions in childhood, a series of over two hundred children were observed at random as they entered the pediatric clinic of the Kern General Hospital between the spring months of 1937-1938. Regardless of presenting complaints, Mantoux and coccidioidin tests were given simultaneously to determine only the relative incidence of the two diseases in this county. There has been no attempt in this study to correlate the skin-test findings with later x-ray and laboratory follow-up work.

**Materials Used.**—For the Mantoux, 0.1 milligram of O. T. was used, and the reaction read and

recorded at the end of twenty-four and forty-eight hours.

One milligram of coccidioidin material was employed and similarly read and recorded.\*

TABLE 1.—Age Groups

Two hundred and sixty-seven children, ranging in age from five months to nineteen years, were included, and divided into four groups.

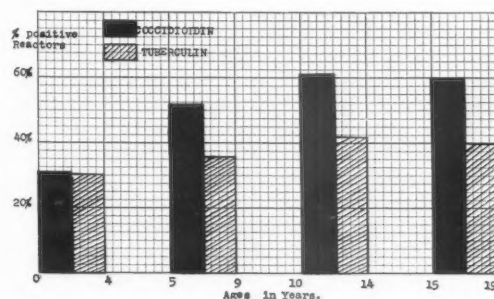
Group	No.	Ages	Per Cent Positive to	
			Cocci- dioidin	Tuber- culin
I	43	0-4 yrs.	31%	30%
II	108	5-9 yrs.	52%	36%
III	106	10-14 yrs.	61%	42%
IV	10	15-19 yrs.	60%	40%
Total	267			

**Sex Distribution.**—There were thirty-five more female than male members in the entire group, but the findings for both sexes were about equal.

TABLE 2.—Sex Distribution

Sex	No.	Per Cent Positive to	
		Coccidioidin	Tuberculin
Male	116	54%	38%
Female	151	51%	37%
Total	267		

In a recent study conducted by Dr. C. E. Smith<sup>5</sup> of Stanford University Medical School, on the incidence of primary coccidioidomycosis in the San Joaquin Valley, he found the ratio of infected males to one hundred females between the ages of 0-14 years to be 77:100. However, with increasing age, he noted that the proportion of infected females became greater, so that by the fifth decade of life there were only two infected males to ten similarly affected females.



In the present survey of coccidioidin reactors, the male-female ratio was 82:100—a significant parallelism seeming to exist between the disease incidence and the percentage of positive skin reactors between the two sexes.

\* Prepared by the Department of Public Health and Preventive Medicine at Stanford University School of Medicine, San Francisco, California.



## RACE DISTRIBUTION

Of the total number tested, 216 were of the white race, and of this number 31 per cent were positive to the Mantoux, and 51 per cent to coccidioidin. There were thirty-five Mexicans in the group, of which 65 per cent reacted positively to tuberculin and 54 per cent to coccidioidin. Of the thirteen negroes, 61 per cent were positive to both Mantoux and coccidioidin tests.

TABLE 3.—Race Distribution

Race	No.	Per Cent Positive to	
		Coccidioidin	Tuberculin
White	216	No. 51% (111)	No. 31% (67)
Mexican	35	54% ( 19)	65% (23)
Negro	13	61% ( 8)	61% ( 8)
Indian	2	..... ( 2)	50% ( 1)
Chinese	1	100% ( 1)	..... ( 1)

## CASE-REACTOR RATIO

That all cases of primary coccidioidomycosis are not accompanied by the characteristic erythema nodosum has been brought out by Dickson<sup>2b</sup> in 1938, diagnosis being made only when the culture of sputa revealed the typical fungus. Gifford noted<sup>6</sup> in an extensive survey of Kern County school children who were coccidioidin-tested that only 11 per cent of some 302 positive reactors admitted knowledge of having had erythema nodosum or "San Joaquin fever bumps" at some time or other, and only 22 per cent remembered having had symptoms of pleurisy, influenza, or pneumonia in the past.

Smith noted that in two different sections of the Valley the incidence of primary coccidioidomycosis to coccidioidin reactor was quite low, being 1:75 in one instance, and 4:143 in another. From his observations he estimated that, of the newcomers to this community in the past five years who had acquired their coccidioides infection, only one out of twenty had frank erythema nodosum.

In the study here presented, forty-two markedly positive skin reactors to coccidioidin, who presented no symptoms or history of erythema nodosum, had stomach washings performed. Of this group only two specimens proved positive for the fungus on culture and guinea-pig inoculation, which makes the case-reactor ratio for this small series 1:21.

## LENGTH OF RESIDENCE IN THE COUNTY

In all of these studies perhaps the most interesting as well as significant fact is that, with increased length of stay in the Valley, there is a noticeably heightened percentage of positive coccidioidin reactors, far exceeding the customary rise in tuberculin reactors.

In contrast to the rise in percentage of coccidioidin-sensitive individuals with increased stay in the Valley, Smith<sup>7</sup> noted that nearly one-half of the 432 cases of erythema nodosum or "valley

fever" observed by him during a period of seventeen months had resided in this locality less than one year, two-thirds less than two years, while only one-ninth of the total number of cases had lived ten years or longer in the Valley. These observations suggest that primary infection with the fungus must occur more frequently during the earlier part of the individual's residence in this area.

TABLE 4.—Length of Residence in Kern County

Years in County	No.	Per Cent Positive to	
		Cocci- doidin	Tuber- culin
Less than one year	40	25%	32%
1-4 years	108	49%	33%
5-9 years	69	70%	41%
Ten years and over	50	76%	25%
Total	267		

## COMMENT

In view of the aforementioned facts, and the observations made by previous investigators that skin sensitivity to coccidioidin is first acquired after the completion of the primary stage of tissue invasion by the fungus, one feels justified in assuming that the large percentage of positive skin reactions found among residents of the San Joaquin Valley signifies that infection by the oidium has occurred (in these individuals) at some time or other with or without erythema nodosum.

Moreover, in a vicinity where this disease is endemic, it would seem that the case incidence of the granuloma stage should be higher and more virulent than it is, but actually more deaths are reported from tuberculosis in Kern County in one year than from coccidioidomycosis in the entire thirty-eight-year period, when the first case was reported.<sup>6</sup>

From his 432 cases of "valley fever," and his case-reactor ratio of 1:20, Smith estimates<sup>7</sup> that these instances of San Joaquin fever should represent some 8 to 10,000 coccidioidin reactors—or "new infections" with coccidioides immitis—in the areas studied.

These estimates point to the relatively benign, as well as the universal nature of the primary or early stage of fungus infection, and tempt one to speculate whether or not individuals so infected have not thus acquired a state of heightened resistance against further invasion by the organism, since the occurrence of coccidioid granuloma in "valley fever" patients is quite uncommon.

At the moment, however, one must be content to admit that a positive coccidioidin test, in the absence of erythema nodosum, fever, weight loss, cough or sputum, merely signifies that, at some time or other in his life, the individual has been infected by the oidium.

While it is true that the skin reaction is most marked during the height of the primary infection,

or when the erythema nodosum is maximum, this same degree of cutaneous reaction may continue for a number of months to a decade or more after the process has subsided, and, in the absence of symptoms, has little bearing on the prognosis of the disease.

This conclusion is in agreement with that of Stewart,<sup>8</sup> who likewise found, in studying some 188 school children, that the average level of cutaneous allergy to tuberculin is independent of the amount, character or presence of the primary tuberculous lesion.

#### SUMMARY

1. Two hundred sixty-seven children, taken at random from the Pediatric Clinic of the Kern General Hospital, and ranging from the ages of 0-19 years, were tested simultaneously with 0.1 cubic centimeter of Koch's O. T. 1:1000 (0.1 milligram) and coccidioidin 1:100 (1 milligram).

2. It was found that there was a noticeably higher incidence of coccidioidin over tuberculin reactors as the length of residence in the county increased.

3. The low ratio of "valley fever-coccidioidin" reactors noted in this and other surveys points to the relatively benign as well as universal nature of the primary phase of coccidioidomycosis infection as it exists in the San Joaquin Valley.

4. Progression into the later and severe granulomatous stage of the disease only occurs when tissue and lymphatic resistance are overcome and generalized dissemination takes place via the blood stream.

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## CONVULSIVE STATES: THEIR DIFFERENTIAL DIAGNOSIS AND MANAGEMENT\*

By LUCAS W. EMPEY, M. D.

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IT is customary to begin present-day discussions of epilepsy with the statement of Hippocrates, who wrote that "Whoever can render a man humid and dry, hot and cold by regimen, could also cure this disease." We might also quote Scripture where the physician said, "This kind (of devils) can come forth by nothing, but by prayer and fasting."<sup>1</sup> From the standpoint of curing long-standing cases of epilepsy, our modern methods do not offer much of an improvement over these suggestions. However, there is some hope of reducing the number of institutional epileptics by proper management of the extramural patient who has not yet experienced more than a few seizures.

The purpose of this paper is twofold: First, a theory concerning chronically recurring convulsions will be presented. No individual part of this theory is original, but rather it seems the logical expression of a vast amount of research done by so many people that it would be impossible to name them all. The simple statement of such a theory might be helpful to those engaged in research, and also serve as a practical means of orientation for those who treat patients in all stages of the disease.

Secondly, the differential diagnosis and management of patients afflicted with recurring attacks of petit mal and grand mal will be presented from the viewpoint of the general practitioner, who, after all, is the one called upon to take care of most of the early cases. For convenience, the term "epilepsy" will be used instead of the longer, purely descriptive term of "recurrent attacks of grand mal or petit mal"; although, admittedly, "epilepsy" is a poorly defined entity in the light of our present knowledge. "To call a patient 'epileptic' means almost nothing in an explanatory sense—it is merely calling him a name."

#### THEORIES CONCERNING CONVULSIONS

Certain chemical poisons are capable of producing convulsions in any individual, *i. e.*, strychnin, lead, metrazol, bacterial toxins, uremia, etc. The theory here presented may be applied, as a whole, or in part, to all convulsions occurring in man, with the possible exception of those caused by chemical poisons.

A given individual may be a "potential epileptic" as a result of either (1) the inheritance of a brain which is susceptible to seizures; or (2) events which occur after conception, including developmental defects in the brain and organic changes resulting from brain tumor, infection, trauma, or vascular disease of the brain; or (3) a combination of two or more of the above factors.

Particularly during the period of growth there may occur fluctuations in the chemical or hormone equilibrium of the blood which are sufficient to

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precipitate a seizure in the "potential epileptic." Fundamentally, a seizure is the result of an abnormal activity of neurones in the brain. This abnormal activity can be demonstrated as abnormal waves in electro-encephalographic tracings (cerebral dysrhythmia). After a period of time the imbalance of the hemic equilibrium may become corrected. However, if a sufficient number of seizures have already occurred, the mechanisms of habit formation and "conditioning" may act as precipitating causes of some or all of the subsequent seizures in some patients. Physiologists<sup>2</sup> have explained the phenomena of habit formation as due to the fact that nerve impulses which have traveled over a certain nervous pathway, as a result of a given stimulus, tend to follow the same pathway again when the given stimulus is repeated. Now, if another different but less intense stimulus is applied simultaneously with the first, impulses are apt to pass along that same certain pathway, and after these two stimuli have been applied several times simultaneously, the application of the second stimulus alone will cause impulses to travel over the same old pathway. This principle, which is known as conditioning, has been proved many times by experiments on animals, as well as on infants.

Since the neurons which are susceptible to habit formation and conditioning are the same that are responsible for epileptic seizures, it follows that habit formation and conditioning may play important rôles in the perpetuation of seizures after they have once begun.

Thus, in some cases of recurring seizures, one might expect that a repetition of the particular environment or combination of stimuli present at the onset of previous seizures would cause another seizure. Cases herewith presented seem to illustrate such a phenomenon.

Heredity is an important etiologic factor in a very high percentage of epileptics. The question remains as to just what is inherited. To say that a person inherits a tendency to have abnormal activity of the cerebral cortex satisfies some investigators, but not others. An abnormal permeability at the surface of nerve cells has been postulated, but not proved. However, the principle that therapeutic measures which decrease cell membrane permeability are effective in raising the threshold for convulsions is now fairly well established, both experimentally<sup>3,4</sup> and clinically.

Imperfect and incomplete though this theory may be, it is, nevertheless, useful clinically in helping us choose which type of therapy to use for each particular patient. It is much better than no theory at all, and much better than many theories which have already been disproved. It is susceptible to proof and further elucidation through clinical research. It will probably be modified or improved as time marches on.

#### DIFFERENTIAL DIAGNOSIS

Cobb has listed sixty different clinical entities which may be associated with convulsions. Many of these, such as carotid sinus tumor, are quite rare. In others a convulsion is a rare occurrence in the course of disease, which is readily recog-

nized by other prominent signs and symptoms. After excluding chemical poisons, hysteria, rare diseases associated with convulsions and diseases which are only rarely accompanied by convulsions, there remains a large group of cases, most of which have been previously classified as epilepsy. But within this latter group there still exists a diagnostic problem in order to determine the particular etiologic factor or factors which are the most important in each case. By careful study and observation of each individual patient who comes to our attention in the early stages of his disease, we should be able to rescue quite a number of people from the embarrassing plight of those afflicted with long-standing, incurable epilepsy. Herewith are discussed some clinical conditions associated with convulsions, but in which it is often difficult or impossible to differentiate from idiopathic epilepsy in the early stages.

The very fact that the early differential diagnosis is so often difficult makes us suspect that these metabolic disturbances are often associated with the beginning of so-called idiopathic epilepsy, and that comparatively slight deviations from the normal may be the trigger mechanisms that start off epileptic seizures in "potentially epileptic" individuals.

#### Infections.

When called to see a patient having his first convulsion, the physician's first thought is to take the patient's temperature, particularly if the patient happens to be a child. It is next to impossible to get either a history or a physical examination completed until the convulsion is stopped. If the body temperature is elevated, the convulsions usually can be stopped promptly with a tap-water enema or a tepid pack.

The simultaneous occurrence of acute infections and convulsions is somewhat paradoxical and confusing until the relationship of the time of the convulsion to the duration of the infection is analyzed. Patients who have been having several seizures per day for many months are often free of convulsions during the course of a febrile disease, yet a severe convulsion frequently heralds the onset of an acute infection in early childhood, *i. e.*, pneumonia. The rapid accumulation of bacterial toxin, or virus, at the onset of an acute infection may be sufficient to activate the sensitive nerve cells, but in a systemic infection with a slower onset the anti-convulsive effects of dehydration and acidosis are sufficient to inhibit convulsions.

If the patient's temperature is elevated, treatment is, of course, directed to the acute infection found to be responsible; but if there is no elevation of the body temperature an exhaustive study and prolonged observation of the patient are indicated.

#### Hyperinsulinism.

If a history is obtained of repeated convulsions always occurring more than four hours after a meal, the possibility of hyperinsulinism must be considered. Offhand, one might expect that it would be a simple matter to decide the issue with a glucose tolerance test, but in the early cases the results are often equivocal. The administration of



20 to 40 units of insulin to see if a convulsion is produced thereby is a useful diagnostic procedure in grand mal cases. Insulin will not produce grand mal seizures in epileptics. However, Lennox and the Gibbsses<sup>5</sup> have shown by electro-encephalograph studies that insulin can increase the number and frequency of petit mal waves in a patient with a well-established diagnosis of petit mal epilepsy.

#### *Tetany.*

Infantile tetany is a definite clinical entity easily recognized by a history of vitamin D deficiency in the diet, special clinical signs, and a decrease in serum calcium. "Latent tetany" is less well defined, and is often indistinguishable from cases that have been diagnosed as epilepsy. Probably many cases that have been reported in the literature as epilepsy could just as well have been called latent tetany, and vice versa. The following case is illustrative.

#### REPORT OF CASE

CASE 1.—E. M., age 25, was brought to the office on December 20, 1938, at 4 p. m. soon after he had fallen in a lavatory. His fellow employees heard him fall. After gaining entrance to the room, they found him sitting in a corner with his head drooping forward on his chest. He seemed confused for several minutes, but was able, with assistance, to walk to the office.

For about five years he had been subject to momentary spells, during which he felt helpless, could not talk, but nevertheless was conscious of what was going on around him. A person who observed one of these attacks stated that the patient looked blank and stuttered a little. Except for the attack which brought him to the office, none of them had lasted more than two seconds. For thirty seconds before this he was able to "feel" that a spell was coming—a light tingling sensation which starts at the feet and gradually moves upward. The spells tended to occur in groups, two or three in a week, and then none for several days. When attacks began in 1933, they were followed by nausea lasting about one minute. He actually vomited on two occasions, but as time went on the nausea failed to accompany the spell. During the third and fourth years after the onset, the patient noticed that the spells were apt to occur whenever he heard someone repeat a certain phrase.

In 1937 he took cod-liver oil for several months, but this did not influence the frequency of the attacks. A survey of his dietary habits revealed that he had taken no milk for over fifteen years, and that he naturally chose a diet comparatively low in calcium content.

The patient had undergone two operations for right inguinal hernia, one in 1929 and one in 1932. A general anesthetic had been used for both, and there was a light attack of postoperative pneumonia following the second operation. In childhood he had spent about one year in bed for the treatment of "rheumatism." He did not recall having a fever, but the joints were stiff and sore.

**Family History.**—Father alive and well. Mother now well, but had a goiter removed in 1937. Two sisters and one brother alive and well. Patient unable to recall that any of his relatives ever had epilepsy, mental disease, migraine, asthma, hay fever, or tuberculosis. Maternal grandfather drank heavily at times.

When first brought to the office, a careful physical examination disclosed no abnormalities except that the face appeared pale. However, when he was reexamined one week later, Chvostek's sign was positive on both sides, and a positive Trousseau sign could be elicited after having the patient hyperventilate. The serum blood calcium determined at this time was 7.5 milligrams per 100 cubic centimeters.

He was advised to take more of the foods with a high calcium content and two grams of calcium gluconate three times a day was prescribed. He took the medicine rather irregularly for a few months and then stopped it altogether. In November, 1939, he was again seen and persuaded to cooperate in a clinical experiment to ascertain the relation-

ship between calcium therapy, the level of calcium in the blood serum and the frequency of his seizures. These relationships are depicted graphically in the chart.

#### COMMENT

If a blood specimen had not been obtained the day before calcium therapy was started, this case could have been reported as one of tetany that responded quite dramatically to calcium therapy. However, inasmuch as the patient several weeks later had a few seizures when the blood calcium was above normal, it might be considered to be petit mal epilepsy.

On the other hand, it can be argued just as effectively that this patient had a mild calcium deficiency associated with a mild degree of hypoparathyroidism for a number of years; that the hypocalcemia occasionally led to uncontrollable, abnormal stimulation of some of the more sensitive neurones just as occurs in tetany; that after several repetitions of this abnormal neuronal activity the involved neurones became conditioned to auditory stimuli in the form of a certain phrase of speech; and that, eventually, the uncontrollable activity of the neurones became habitual. Thus, one might conclude that tetany was the original underlying cause of seizures, even though the diagnosis of petit mal epilepsy is correct at the present time.

From the patient's viewpoint, it does not make much difference. Patients who show evidence of calcium deficiency should be given the benefit of calcium therapy, regardless of the diagnosis.

#### "ORGANIC" EPILEPSY

Whenever convulsions occur in infants without fever, a congenital developmental brain defect, or birth injury to the brain must be considered as the most probable diagnosis, provided tetany can be excluded. In childhood and adult life the possibilities of brain tumor, vascular lesions and post-traumatic or postinfectious, scarring of the brain must be added to the above. If a careful history and neurologic examination suggests any of these possibilities, air encephalography and electroencephalography should probably be done, especially if facilities for good brain surgery are available. However, it must be admitted that even in properly selected cases the results of brain surgery for the cure of convulsions *per se* are not very encouraging, particularly in the light of long post-operative follow-ups. Six years after operation, Penfield found that 46 per cent of his patients were free of seizures.

#### TREATMENT OF RECURRING SEIZURES

Because of the clinical observation that repetition of seizures tends to favor the occurrence of more seizures, the employment of measures which prevent or decrease their frequency cannot be considered as mere palliative therapy. Such measures include (1) the elimination of precipitating causes, (2) raising the seizure threshold, or (3) a combination of both methods. The decision as to which method is best for the individual patient rests on a careful evaluation of all the factors involved in that particular case. However, in general, the elimination of precipitating causes is most useful in

early cases of less than five years' duration, whereas, in long-standing cases, measures designed to increase the seizure threshold are the only ones that are effective. But the patient's age, occupation, willingness to cooperate, and the frequency of his seizures, must also be considered.

The elimination of precipitating causes involves (1) the elimination of stimuli to which the neurones have been conditioned in such a way as to cause seizures, and (2) the possibility of correcting an imbalance of the hemic equilibrium in very early cases. Regarding the latter possibility, very little is known and much research is needed; hence it is usually impractical for general use at the present time. The elimination of conditioned stimuli is not always practical. For instance, if a business man were conditioned to a certain phrase of speech used commonly in ordinary conversation, it would not be possible to eliminate such a stimulus. However, in other instances it is fairly easy to accomplish and may by itself prove to be all the treatment that is necessary, as is illustrated in the following case:

CASE 2.—C. H. had his first seizure in November, 1934, at the age of eighteen years. He had had a total of ten seizures when he was first seen in March, 1938, or an average of about three seizures a year. He lost consciousness with each spell, and every one of them had occurred either immediately after awakening or within two hours after awakening in the morning. Further observation over a period of two more years demonstrated the fact that every seizure has followed fatigue. The patient is a college student, who earned part of his income by playing in a band for dances once a week.

In July, 1935, about seven months after his first seizure, several laboratory tests were done. The glucose tolerance test showed a hypoglycemic tendency. The red blood cell count was interesting, and was repeated at varying intervals as follows: July, 1935: 6,200,000; March 15, 1938: 8,780,000; March 22, 1938: 5,216,000. Weekly blood counts from April 6, 1938 to May 25, 1938, inclusive, varied within normal limits (5,000,000 to 5,425,000). There had been no fever, exposure to hot weather, or other cause for dehydration at the times these counts were taken. The water restriction régime was not tried until several months later.

Until January 10, 1940, the seizures had invariably occurred the morning after he had stayed up late playing at a dance. On that day a seizure occurred at 11:30 p. m., after a particularly busy day when he had been obliged to rush around considerably in order to keep appointments. He was limiting his fluid intake to less than one quart per day at the time when this seizure occurred. As this treatment had apparently not been successful, he was advised to stop playing in the band and to go to bed before 10:30 every night. Since following this advice, there have been no seizures, but it is, of course, too early to evaluate the effectiveness of this treatment in this particular case.

#### COMMENT

Many therapeutic measures which raise the seizure threshold are available. Lennox and McQuarrie have depicted them graphically in different ways. Lennox uses the simile of a reservoir which is being dammed back by the various therapeutic factors, but is being filled at the other end by other factors tending to cause seizures, and McQuarrie uses a segmented circle in order to illustrate the relative clinical importance of the available therapeutic possibilities. These methods of therapy include fasting, the ketogenic diet, limitation of water intake, mental hygiene, physical hygiene, and drugs.

With the right kind of cooperative parents it is usually possible to control seizures in children by dietetic measures, but most ambulatory adults are not satisfactorily controlled in this way, and for the following reasons:

1. There is no third person present to enforce the prescribed régime.
2. Many adults do not eat regularly at home, and it is difficult to select a ketogenic diet from a restaurant menu or at the home of a friend.
3. Often the epileptic patient does not appreciate the seriousness of his own situation, and will not go to so much trouble to prevent infrequent seizures; after a long free interval, he is apt to regard himself as cured, regardless of what his doctor tells him.

Bromids, phenobarbital, and dilantin are the most useful drugs. A priori, one might expect ammonium bromid to be more useful than the others because it combines mild sedation with the acid-forming effect of the ammonium ion. By means of clinical research, Proescher<sup>6</sup> has demonstrated that such is actually the case. If bromids or phenobarbital are not effective in a dose smaller than that which produces an undesirable degree of sedation with blunting of the intellect, they should be combined with other forms of therapy rather than increasing the dose. Paskind has shown that some ambulatory patients can be satisfactorily treated with bromids alone for many years without producing bromism or impairing intellectual activity.

Lennox<sup>7</sup> has just recently discussed drug therapy in a review which can be read profitably by anyone who treats patients subject to seizures. A synergism between phenobarbital and dilantin in preventing seizures has been demonstrated by Cohen, Showstack, and Myerson.<sup>8</sup> In using the latter drug the patient must be kept under close observation at first in order to minimize the possibility of undesirable side effects.

Ammonium chlorid or other ammonium salts can effectively prevent seizures if given in large enough doses. Often it is more desirable to use them along with small doses of phenobarbital.

In many cases a combination of two or three types of therapy is preferable. For example, a combination of the elimination of conditioned stimuli and ammonium bromid may be used as in the following case:

CASE 3.—P. M. began having nocturnal convulsions in October, 1938, at the age of fourteen years. Typical grand mal seizures were described by her father, although with some of the attacks she did not lose consciousness completely. Seizures occurred at the rate of one to six per month, and always happened when she was sleeping. Occasionally there was a seizure when she was taking a nap in the afternoon.

Physical examination showed no abnormalities and the laboratory examinations were all negative, except that the glucose tolerance test showed a low blood sugar at the end of four hours. On September 13, 1939, the possibility of a diagnosis of hyperinsulinism was finally ruled out by giving her 20 units of insulin, which brought the blood sugar down to 52 milligrams per 100 cubic centimeter in one-half hour, but did not produce a seizure.

The patient was in a hospital for a week in March, 1939, and again in October, 1939. Single doses of phenobarbital .1 gram or dilantin .1 gram at bedtime had not prevented the occurrence of nocturnal seizures. However, it

was noted that she never had seizures when she was in the hospital, even though she received no medication there. Upon returning home from the second stay at the hospital, the patient was placed in an entirely different bedroom with new furniture, and the father slept in an adjacent room, rather than sleep in the same room with her as he had been the custom previously. (The patient gave a cry at the start of a seizure, so the father, who is a light sleeper, would still have been able to hear her.) Simultaneously, the patient was started on ammonium bromide 0.5 gram four times a day. This dose was reduced once a month and finally discontinued altogether on April 2, 1940. No seizures have occurred since this régime was started (seven months).

Calcium lactate, 20 to 30 grams daily in divided doses, may prove useful in properly selected cases, particularly those which show any clinical evidence of tetany.

#### SUMMARY

1. A working theory of etiology and pathogenesis, consistent with present-day knowledge concerning recurrent seizures, is presented.

2. The differential diagnosis of convulsive states is discussed.

3. The treatment of "epilepsy," based on the aforementioned theory, is discussed and illustrated, with emphasis on the desirability of individualization.

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#### PROGRESS IN THE EXAMINATION OF SEMEN RELATIVE TO FERTILITY\*

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WE have been slow to realize, until the last twenty years, that from 30 to 50 per cent of barren marriages may be attributed to the male partner. Even though this fact has been established, attention to the examination of the semen has lagged, and it is only since Moench,<sup>1, 2, 3, 4</sup> about ten years ago, utilizing W. W. Williams's<sup>5</sup> thorough re-

search upon the semen of bulls, made a marked step forward with his studies of the morphology and biometrics of the spermatozoa of man, that intensive study of this subject was stimulated.

Advances in our knowledge of the chemistry and physiology, not only of the genital system, but also of anatomically distant but closely interrelated systems of the body, have caused us to radically alter our views. Today we know that there is a marked interdependence of the gonads and other members of the endocrine system, and the accessory sex organs are dependent upon them. In particular, the gonads, anterior pituitary, thyroid and adrenals must be considered in all investigations of sterility.

#### RÔLE OF VITAMINS AND HORMONES

Our knowledge of the requirements of the body for its proper function, and particularly of the sexual and reproductive processes, has been enhanced by the discovery of the vitamins. Lack of either of the vitamins A or E has been conclusively proven to cause degeneration of the testes, and to affect ovarian function adversely. An intelligent study of lowered fertility must include an evaluation of the part played by the hormones and vitamins.

Analysis of the semen gives us a measure which aids us, not only in determining relative fertility, but also in checking the efficiency of our treatments. Extensive research with laboratory animals has shown that, next to actual production of gestation, this analysis is the most important measure in determining the cause and cure of lowered fertility and faulty reproduction.

#### COLLECTION OF THE SPECIMEN

The specimen should be collected in a small glass container, as a condom may affect unfavorably the viability of the sperm and reduce the volume of semen. If a condom is used, the contents should be transferred immediately to a suitable glass receptacle. A "condom specimen" is often brought to the office; but unless the examination shows it to be apparently of high fertility, it should be rejected, and further specimens studied.

The container should be kept at a moderate temperature and the patient warned against exposing it to extremes of heat or cold. Owing to the increased consumption of energy at body temperature, and the consequent decrease of endurance, it should not be carried next to the skin, as was formerly advised.

The most satisfactory method of obtaining the specimen is by withdrawal at the time of intercourse, and not sooner than four days after the last intercourse.

In most patients, the psychological disturbance incident to masturbation, especially at the physician's office, may give a misleading sample. This procedure, however, frequently gives satisfactory results.

The most favorable time for examination is from one to two hours after ejaculation, as by this time liquefaction has usually occurred.

#### NATURE OF SPECIMENS

Since certain findings are undisputed, I shall not, in every case, burden a paper of this type with references and discussion. For instance, the fertile

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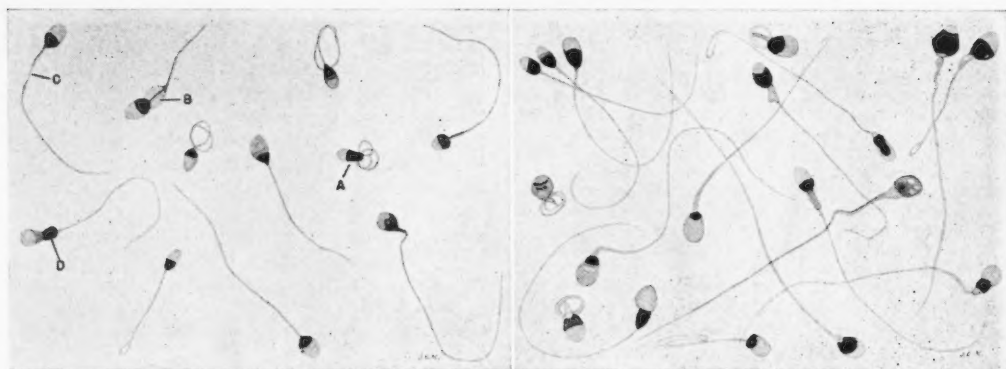


Fig. 1

Fig. 2

Fig. 1 (Case 1).—N. C. B. Fertile case (normospermia). Normal and abnormal spermatozoa in one field. Legends: (a) Slightly tapering cell with coiled tail; (b) cytoplasmic remnants on middle piece; (c) partially naked axis cylinder; (d) deformed middle piece.

Fig. 2 (Case 1).—N. C. B. Fertile case. Same as Fig. 1, but showing high percentage of abnormal forms. Note irregular and vacuolated head forms; deformed middle pieces.

male's normal amount of semen usually varies from  $2\frac{1}{2}$  to 6 cubic centimeters; the viscosity at first is slight, then tends to increase, and the specimen rapidly liquefies. Very watery or very thick specimens are abnormal, the former usually containing few cells. Both the viscosity and the volume are dependent in a large measure on the activity of the accessory sex glands, most of the semen, by far, being produced by these organs. Similarly, with the exception of the spermatozoa, most of the formed elements are from these glands, and the passages through which the spermatozoa pass. In normal semen, masses of cytoplasm, which are cast off in the metamorphosis of the spermatozoa, are present. These are greatly increased in cases of lowered fertility.

#### EXAMINATION OF THE SPERMATOZOA

The most important part of the analysis is the examination of the spermatozoa. Our knowledge and methods of investigation of this very essential constituent of the semen are still in an elementary and formative stage. Arbitrary interpretations have had to be placed on these findings.

Viability of the sperm is dependent upon many external factors, as well as upon an inherent quality of the sperm itself. According to Belding,<sup>9</sup> "Viability depends upon the temperature at which, and the menstrum in which, the sperm are held." He found that motility continued longest at 8 degrees centigrade, and in Baker's fluid. Under these conditions motility endured for an average of 153 hours, as compared with 96 hours in the spermiatic fluid. At 37.5 degrees centigrade, they were active only 23 hours in either. Moench found that sperm from the same ejaculate lived longest in the ice-box (4 to 5 days), 18 hours in the incubator and 36 hours at room temperature. Knaus<sup>21</sup> has shown that transplantation of the testis into the abdominal cavity of rabbits results in a degeneration of the seminiferous tubules, evidently due to the fact that the abdominal temperature is higher than that of the scrotum.

The pH of semen is usually above 7.5 and below 8.5. Slight variations beyond these limits have a deleterious effect upon the motility. (Muschat,<sup>17</sup> Schlenk and Kalmann.<sup>18</sup>)

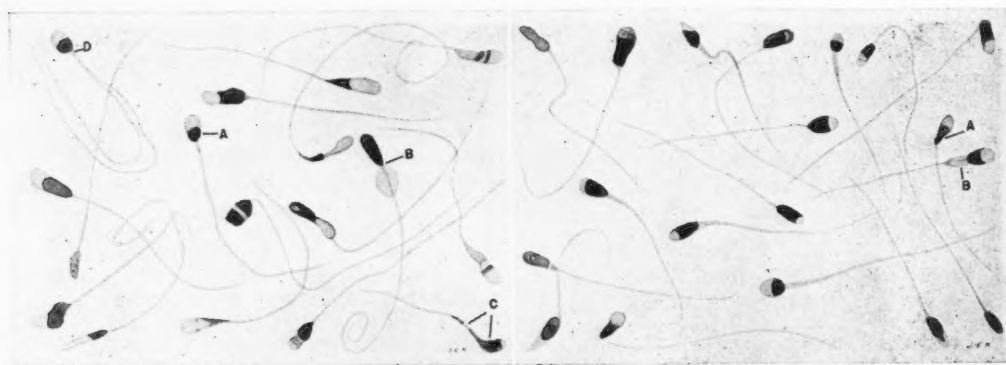


Fig. 3

Fig. 4

Fig. 3 (Case 2).—J. M. B. Poikilospermia; practically all cells abnormal. Note irregular staining. Legends: (a) Oval (normal form); (b) narrow solid staining head with cytoplasmic rest; (c) greatly deformed head with partially naked axis cylinder; (d) normal head form with double tail.

Fig. 4 (Case 3).—E. B. R. Poikilospermia. Note great irregularity in size, shape and staining. Legends: (a) tapering cell; (b) cytoplasmic rest.



Fig. 5

Fig. 5 (Case 4).—S. J. Oligospermia (moderate); asthenospermia; polkiospermia (moderate). Note irregular shape and staining; unusual posterior end knob formation, upper right corner.

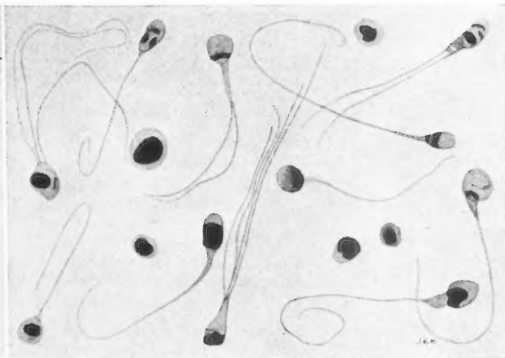


Fig. 6

Fig. 6 (Case 5).—Oligospermia (marked); asthenospermia; polkiospermia (marked). Practically all heads are irregularly shaped, various sizes, with irregular staining. Many double or more tails. Note high percentage of spermatogenic cells.

The production of lactic acid and carbon dioxide through the metabolism of the sperm affects unfavorably the surroundings of the sperm (Redenz<sup>19</sup>), and this change in turn affects the sperm adversely.

The vaginal and cervical secretions have a direct effect upon the ability of the sperm to continue its passage through the female genital tract. Vaginal acidity apparently kills most of the spermatozoa, but stimulates the motility of many in their efforts to reach the more favorable alkaline content of the upper part of the tract (Sequey and Vimeux).<sup>20</sup>

Contrary to popular medical opinion, motility is not identical with fertilizing ability, as has been shown by many investigators (Hammond and Asdell,<sup>7</sup> Young,<sup>8</sup> Knaus<sup>21</sup>). There can be no doubt, however, that motility is essential to fertilization in the human; but up to the present its exact rôle remains obscure.

#### TIME OF EXAMINATION

For the study of the motility of the spermatozoa, the semen should be examined within an hour after the time it is ejaculated. Practically, it is often diffi-

cult to obtain the specimen in less than two hours, but this usually gives us nearly as much information. Immediate microscopic examination of the fresh wet specimen is, of course, indispensable for determining motility factors, such as the percentage of sperm showing motility, the grade of motility and its duration.

The oil immersion, as well as the low and high dry objectives should be used, as this gives a more comprehensive and detailed picture than if only one of the objectives is used.

The fresh, unstained specimen is important not only in the study of the motility of the spermatozoa, but of the morphology and structure of the cell as well. Comparison with the stained specimen aids us in judging just how much damage is produced by the fixing and staining, and to what extent deviations from the norm are due to this damage.

#### EVALUATION OF OTHER FACTORS

Evaluation of such deviations as microsperms, cytoplasmic rests, coiled tails, et cetera, is greatly aided by comparison of the stained and wet un-

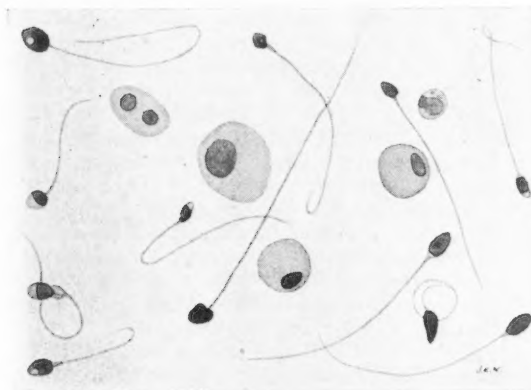


Fig. 7

Fig. 7 (Case 6).—E. B. N. Oligospermia (extreme); asthenospermia; polkiospermia (marked). Note great variation in size of heads, irregular and solid staining as compared with normal oval head with cystoplasmic rest on middle piece (second from bottom in left corner). High percentage of spermatogenic cells, one with double nuclei.



Fig. 8

Fig. 8 (Case 3).—E. B. R. Microphotograph (x 1600). Note differences in size of cells. All cells same magnification. Legends: (a) Normal shaped spermatozoa; (b) vacuolated head; (c) extreme tapering type; (d) "giant" form with reverse staining; (e) marked "tapering" cell (note vacuoles); (f) immature double heads; (g) mature double heads; (h) normal shaped spermatozoa showing vacuole; (i) spermatid with double nuclei (note cytoplasm around nuclei); (j) narrow head and nucleus.

stained slides. The relative amount of cellular debris present is better judged in the wet examination.

Motility is examined from three standpoints:

1. Percentage of motile forms.

In the usual fertile case, the vigorously active forms are present in from 70 to 90 per cent of the total number. Many fertile men have a much lower percentage. However, no limits can be stated as to the percentage required for successful impregnation.

2. Degree of motility.

A satisfactory classification is (a) vigorously motile, (b) moderately motile, (c) sluggishly motile, (d) amotile. It must be borne in mind that the degree of motility is not constant, and that amotile forms commonly become motile at later periods, or may be stimulated into activity.

A diagnosis of necrospemia should never be made until a number of specimens have been examined at intervals for several hours and any reactions to stimulating solutions and temperatures noted.

3. Duration of motility.

Duration of vigorous motility should persist for at least seven to eight hours for a specimen to be considered of high fertility. Not uncommonly, a considerable degree of activity (for as long as 24 to 48 hours) is seen in such a specimen, kept under ordinary conditions, at room temperature.

All specimens should be observed at least every 2 to 4 hours for the first 7 to 8 hours.

Hühner's<sup>10</sup> test on the activity of the sperm in the postcoital vaginal and cervical specimen should always be included in an examination for motility.

Summing up the importance of motility, in my opinion, the presence of a high percentage of vigorously active, normally formed spermatozoa, and the maintenance of these factors for at least 7 to 8 hours, are essential to normal fertility.

#### SPERM DENSITY

The number of sperm in the ejaculate is an instance of Nature's prodigality. The normal fertile man will usually ejaculate from 3 to 6 cubic centimeters of semen, with from 60 to 300 million spermatozoa per cubic centimeter. Meaker<sup>11</sup> states that, in his experience, no pregnancy has occurred where the count was under sixty million per cubic centimeter, and this figure has been accepted by many as the lowest limit at which fertility may be expected. Many cases are cited, however, where impregnation has occurred, in which the density was far below Meaker's standard. Hotchkiss,<sup>12</sup> in his studies of two hundred fertile men, found over 25 per cent with a lower number of sperm, and, in ten cases, the count was less than twenty million per cubic centimeter. However, he found the average to be 120,530,000. Lane-Roberts<sup>13</sup> reports one fertile case with a count of only four million per cubic centimeter.

When present, an oligospermia is usually associated with an asthenospermia, which is indicated by a decrease in the normal motility, and in an increased percentage of abnormal forms.

While a true aspermia is not uncommon (Hotchkiss<sup>23</sup> found it present in 18 per cent of 150 "barren" men), it is often diagnosed on too slight evi-

dence. A diagnosis of aspermia should be made only when no sperm have been found in several specimens following centrifuging for 15 to 20 minutes. Before centrifuging, the semen should be diluted with five to ten times its volume of some solution which will remove much of the mucus. Ringer's solution, with 0.5 per cent chloramin added, is very satisfactory for this purpose.

One may conclude that, although oligospermia of a sufficient degree is commonly indicative of a lowered fertility, it is not unusual for fertility to occur, even with a reduced density. Asthenospermia and morphological changes from the normal are usually found with this lowered density, and must likewise be considered as important modifying factors. Pollack and Jöel<sup>14</sup> state that the spermatogenic cells are relatively increased in oligospermia. I have been able to confirm this in many, but not all, of such cases.

#### MORPHOLOGY OF SPERMATOZOA

The morphology of the spermatozoa in a fertile individual exhibits considerable variation. But observation, in man and other animals, has shown that "an abnormal ratio of spermatogenic abnormalities reduces fertility, that man does not well tolerate more than about 25 to 30 per cent spermatogenic abnormalities, the bull not more than about 17 per cent, and the stallion not more than about 30 per cent." This statement by Williams<sup>6</sup> expresses briefly, and within broad limits, our present knowledge of this semen characteristic.

Moench<sup>2</sup> concludes:

1. "In normal semen the abnormal sperm heads do not exceed 19 to 20 per cent.
2. "When the sperm head abnormalities reach 20 to 23 per cent, impaired fertility can be assumed.
3. "When the sperm head abnormalities are above 25 per cent, clinical sterility is usually present."

Variations in size and shape of the sperm head, if present in a large enough percentage of the sperm population, are regarded as pathological. The oval head has been generally accepted as the normal, and variations from this, such as tapering, narrow, sickle, et cetera, are considered pathological for the individual cell. Likewise, considerable deviations from the normal head-length are considered as microsperms or megalosperms. Moench states that the presence of more than 8.5 per cent of tapering cells precludes fertility. In Hotchkiss'<sup>12</sup> series of two hundred fertile men, this limit was exceeded in 11 per cent of the cases. The discrepancy may be due to different interpretations of this cell shape.

While Moench's observation that the finding of 20 per cent of abnormal cells proves a lowered fertility is supported by his excellent studies on many cases, Hotchkiss,<sup>12</sup> Williams<sup>22</sup> and others have found a considerably higher percentage of abnormal cells in fertile men.

Moench's<sup>2,4</sup> thorough and painstaking biometrical studies of the head-lengths are valuable. They are, however, time consuming and require special technical instruments not available to most physicians.

In addition to variations in the sperm head, the very much narrower middle piece and long, narrow tail often show abnormal changes which are im-



portant, but are not so significant as those which appear in the head. (Moench,<sup>2,4</sup> Williams and Savage.<sup>5</sup>) In the bull, abnormalities in the middle piece are seen less often and appear to have more significance. (Lagerlöf.<sup>16</sup>)

#### ILLUSTRATIVE CASES

The spermatozoa were sketched by means of the camera lucida. Each group includes only those sperm found in one microscopical field (1/12). As I desired to show as many abnormalities as possible occurring in any one case, the percentage in many of these fields is higher than the percentage of abnormal forms in the specimen in general.

#### REPORT OF CASES

CASE 1.—(Fig. 1.) N. C. B. Age 29. Normospermia. Fertile. Sperm number, 75,000,000 per cubic centimeter. Total ejaculate, 4 cubic centimeters. Morphology: Oval (normal), 84 per cent.

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CASE 1.—(Fig. 2.) N. C. B. Age 29. Normospermia. Fertile. Microscopic field from same slide as Fig. 1, showing, however, high percentage of abnormalities. If the whole specimen had been judged from this field alone, it would have been misleading. Shows the necessity of counting at least from 300 to 500 cells from different parts of the slide in the specimen.

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CASE 2.—(Fig. 3.) J. M. B. Age 33. Poikilospermia. "Involuntary" sterility eight years; married eight years. Sperm number, 140,000,000 per cubic centimeter. Total ejaculate, 1½ cubic centimeters. Morphology: Oval (normal), 27 per cent.

*Comment.*—Case showed only a change in morphology, sperm density and motility being normal. Illustrates the necessity of counting from 300 to 500 cells, as percentage of abnormal in this particular field was much higher than percentage of abnormalities in general in the specimen.

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CASE 3.—(Fig. 4.) Microphotograph Fig. 8. E. B. R. Age 32. Poikilospermia. "Involuntary" sterility seven years; married ten years. Sperm number, 60,000,000 per cubic centimeter. Morphology: Oval (normal), 20 per cent.

*Comment.*—Motility and number of sperm normal. This man's semen had been examined several times before I saw him, and he had been pronounced fertile, presumably because no differential examination of the spermatozoa had been made.

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CASE 4.—(Fig. 5.) S. J. Age 53. Oligospermia (moderate); asthenospermia (marked); poikilospermia (moderate). "Involuntary" sterility eight years; married eight years. Sperm number, 40,000,000 per cubic centimeter. Total ejaculate, 1½ cubic centimeters. Morphology: Oval (normal), 62 per cent.

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CASE 5.—(Fig. 6.) W. E. Age 34. Oligospermia (marked); asthenospermia; poikilospermia (marked). "Involuntary" sterility seven years; married seven years. Sperm number, 10,000,000 per cubic centimeter. Total ejaculate, ¾ cubic centimeters. Morphology: Oval (normal), 20 per cent.

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CASE 6.—(Fig. 7.) E. B. N. Age 27. Oligospermia (extreme); asthenospermia; poikilospermia (marked). "Involuntary" sterility three years; married three and one-half years. Sperm number, 2,840,000 per cubic centimeter. Total ejaculate, 4½ cubic centimeters. Morphology: Oval (normal), 20 per cent.

#### CONCLUSIONS

In my opinion, we are not able to set a definite standard as to the number of sperm that must be

present in order to assume that a man is fertile. While the morphology of the sperm is of the utmost importance, we cannot say that the finding of certain deviations from the normal in the morphology, or an increase in the number of any certain abnormalities means a relatively decreased fertility in any one individual. All that we can say of these and other sperm characteristics is that in most fertile men there are certain standards present. Broad deviations from these lead to assumption of a decreased fertility. Our judgment must be based, not upon any one single finding, such as number of spermatozoa, percentage of abnormal forms, degree of motility or percentage of motile sperm present, but on a correlation of all findings in the semen with those in the history and physical examination of the couple concerned.\*

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\* Camera lucida drawings were made by Mr. I. Schechmeister, to whom the author expresses thanks.

# ECZEMA OF INFANCY AND EARLY CHILDHOOD: ITS PEDIATRIC MANAGEMENT\*

By CRAWFORD BOST, M. D.  
San Francisco

WHEN we see an infant presenting skin lesions falling into the eczematoid group, the question at once arises: with which group are we dealing? The necessity for a proper classification, therefore, is essential. Within certain limitations this is not difficult. It is generally accepted that 75 per cent of all eczema patients in the infant age group have atopic dermatitis.<sup>1</sup> Most of the rest have seborrheic dermatitis. The remaining few fall either into the contact dermatitis or eczematoid fungous infection group. With such knowledge as our initial diagnostic procedure, a careful history is taken. We want to know, first, the age of onset and the initial site or sites where the lesions appeared. The pediatrician so often has the distinct advantage of seeing the infant at the very inception of eczema. He is often familiar with the baby's feeding and environmental history from the day of birth. With proper inquiry he may obtain from the mother a story of her food idiosyncrasies during pregnancy. He has previously known or can learn, at first hand, of the tendency to colic or uneasiness following feedings, and of the initial response to the addition of each new food. In addition, he may receive repeatedly from the mother details pertaining to her infant's reactions and responses. The early recognition of such skin lesions should be an aid from the standpoint of early treatment, prevention of spreading and prophylaxis from further allergic troubles. Obtaining a positive family history of allergy is helpful in placing the lesions in the atopic group, but may not be reliable, for the parents may not as yet evidence allergic tendencies.

In addition to a careful history we wish to examine the skin lesions.

## SEBORRHEIC DERMATITIS

In the earliest age group (six weeks to six months) if the lesions started on the scalp, cheeks or forehead, or if they appeared as circumscribed patches on the trunk or extremities, and if, on examination, they are yellow to orange in color, scaling or with greasy scales, seborrheic dermatitis is a likely diagnosis. The initial lesion in this condition is often a group of shiny papules which quickly become covered with greasy scales. On the trunk and extremities well-circumscribed patches may be present from which, as described by Hill,<sup>1</sup> "by fusion large sheet-like areas may develop." Should further examination show that little, if any, itching is present and, in addition, further history fails to reveal a positive family history of allergy, the diagnosis of seborrheic dermatitis is probably correct. Such a baby is apt to be rather fat, whether breast- or bottle-fed. This infant will usually re-

spond to a low fat-high protein formula; a milk in which the fat has been altered (evaporated milk); or one of the low-fat proprietary milks. In addition to this we have found that the substitution of cod-liver oil concentrate for the oil itself may be beneficial. It is interesting to note that many mothers are convinced that cod-liver oil has something to do with the rash. Explanation of the good response to these measures may be that faulty fat metabolism, long felt to be a cause of seborrheic dermatitis, is closely linked to its etiology. Some infants will not improve on such a régime, which brings to mind György's concept, that the etiology is a combination of a toxic product from unsplit lactalbumin and a deficiency of vitamin H (this vitamin is said to be contained in the casein fraction of milk—more in bovine than in human milk—but is set free only by proteolytic digestion of the protein). It is more likely that we do not, as yet, understand the true etiology of this disturbance. Local applications are, of course, of great importance. To avoid repetition in today's symposium, a discussion of these measures will be omitted at present. Usually these infants clear entirely in a period of a few weeks. Some who do not respond may be of the eczematoid fungus infection group, others are forerunners of atopic dermatitis group. We have all seen, I am sure, infants correctly diagnosed as seborrheic dermatitis, in whom atopic eczema appears after a short time.

## ATOPIC DERMATITIS

This is the type commonly called infantile eczema. Again, our patient when first seen is apt to be between the ages of six weeks and six months. The lesions may have started on the cheeks or forehead, the outer surface of the legs, in patches on the trunk (not well circumscribed patches), or on the arms. The earliest lesion is apt to be a group of papules, but soon tiny vesicles are prominent, the rupture of which produces weeping followed by dry crusting. As described in the texts, papules, vesicles, scales, erythema, weeping areas, crusting, may all be present simultaneously. In addition, spreading to all parts of the body may occur. These lesions itch, itch severely, and resultant scratching accounts for a much varied appearance of the skin in different parts of the body. Add to such findings on examination a positive family history of allergy and the diagnosis of atopic dermatitis seems certain. The proper management of atopic individuals demands, of course, some idea as to what may have occurred in such an infant in order to have his skin react in this manner. It is generally agreed that the individual is hypersensitive—that he has become sensitized to some substance which is antigenic, usually protein in nature. The repeated exposure to such a substance produces an antigen-antibody reaction resulting in the elaboration of a histamin-like substance which irritates the skin.

The work of Lippard<sup>2</sup> and others suggests that the difference in reaction of the normal and eczematous infant is one of degree only. The ability to react in this manner may be inherited. Ratner<sup>3</sup> and others have demonstrated that sensitization may occur *in utero* through placental transmission.

\* Read before the joint session of the Sections on Dermatology and Syphilology and Pediatrics at the sixty-ninth annual session of the California Medical Association, Coronado, May 6-9, 1940.

From the Department of Pediatrics, University of California Medical School, San Francisco.

Our knowledge of the actual mechanism of sensitization is most vague. Recently, Shaw and Thelander<sup>4</sup> have suggested that vitamin C deficiency may be a factor in the ability of an individual to become sensitized. The preceding statements are not offered as a complete explanation of the present knowledge of the immunologic approach, but simply to enumerate the thoughts which come to mind in preparation for handling an infant with atopic dermatitis. Much is yet but poorly understood concerning the underlying mechanism in infantile eczema: many of these patients do not respond to our present method of treatment, and yet, at the present time, results based on such an approach are better than from any other method. In this view, Hill<sup>5</sup> has very aptly stated: "The trouble is that often in the literature of infantile eczema there have been too few solid facts to justify some of the conclusions that have been drawn."

#### TREATMENT

##### *Local Measures.*

Having satisfied ourselves with the correctness of the diagnosis, and with the foregoing information in mind, we are ready to outline a procedure for handling the patient with atopic dermatitis. Our attention is primarily directed to the local treatment. First of all, because control of the itching will give relief to the patient and because prevention of scratching will limit the spread of the lesions in considerable degree. In the mild and early cases this may be all that is necessary. By local treatment we do not mean just the application of ointment, lotion, powder, etc., to the inflamed skin, although we recognize that proper selection and application of such agents is extremely important. The choice of such preparations will naturally vary with the type of skin lesions present. The recent papers of Sulzberger,<sup>6</sup> Hill,<sup>7</sup> Wise and Wolf<sup>8</sup> give in detail certain principles for such choice, and today we will hear further discussion on this subject. Following the choice of the proper agents, instruction of the mother in their correct application must be given in detail. I have a horror—not apparently shared by everybody—of covering the infant from head to foot with a sticky ointment. Further, I am sure, such overtreatment locally often results in distressing effects. Next to local application, proper and adequate restraint of the patient is most important. This varies all the way from simple bandaging, in the mild cases, to complete restraint in the severe. Clean linen strips have been found most satisfactory for covering involved areas. Caution must be exercised against covering too large an area, or applying the bandage too tightly; and from the standpoint of overheating the skin, with the result that free perspiration with resultant intense itching occurs. In the more extensive cases, stripping the body of clothing and securing the arms and legs are necessary. Use of a cradle to keep bed clothing from the skin is a simple matter. Here the use of a satisfactory surface for the body to lie on is important. Cellophane has been used, but is rather perishable—at the University of California Hospital washed x-rays films have proved most satisfactory. Slanting the mattress so that urine and excreta do not contact the

skin is also an important detail. Such restraint can be exerted in the home, but is usually more satisfactory in the hospital. Cleansing of the skin is also of importance, either in the mild or severe cases. Application of oil rather than water baths, and the avoidance of soaps is generally practiced. In the runabout patient the use of light, cool and soft clothing is essential. There are many other important considerations for individual cases about which we will hear more today.

#### IMMUNOLOGIC APPROACH

Local treatment is not always enough, and it is then that a careful history, with emphasis on details, concerning the child's feeding and environment will often give valuable clues.

##### *Dietary Measures.*

Often when first seen the infant with eczema is on a very simple diet. This frequently consists only of cow's milk, sugar of the sort used in infant feeding, fish oil and orange or tomato juice. If foods are of importance, this should be an ideal setup for control of the eruption. Removal of the accessory food factors, with substitution of ascorbic acid and vitamin D other than fish oil and a change of sugar to one from a different source, are first tried. Sometimes the history suggests the appearance of the eruption with the addition of one of these substances, but only once in a while does marked improvement occur with their withdrawal. This suggests cow's milk as the important factor. We know from the allergist that, excepting those to egg white, positive skin tests to milk lead the list of the common foods. Therefore, change to evaporated milk or some other denatured proprietary milk may be of value. The more general use of evaporated milk in infant feeding has resulted, I believe, in the reduction of the number of eczemas seen in practice. Brilliant results do not always follow this procedure, however, and it is then that goats' milk may be tried. All of us have had the pleasure of a remarkable success after such a change. Again, however, often the rash does not disappear—perhaps the infant is casein sensitive?<sup>9</sup> At this point a milk substitute, several of which are available, may be used. I have not had Hill's success with these preparations, and on the whole find them nasty to deal with. Milk does not account for all the eczemas in infancy, of course, and further dietary sleuthing must often be resorted to. With an infant or older child on a more varied diet, all the foods eaten may be subjected to elimination and substitution. Fortunately the dietary of early infancy is rather limited, and the time consumed in such procedures is not too prolonged. In older children other methods must be employed, and this is where skin tests seem to be indispensable.

##### *Environmental Measures.*

Often, however, after the above procedures have been tried, foods appear to have nothing to do with the skin lesions. It becomes increasingly more apparent to me that inhalant substances are often of major importance.<sup>10</sup> Even the tiny infant has inhalant contacts of such varied nature: house dust, feathers, kapok, animal hairs, wool, silk, and orris root,<sup>11</sup> to mention only those most investigated up



to the present. There must be others of equal importance. Elimination of all such substances, even from the infant's environment, is most difficult, and from the standpoint of the older child may be impossible. A history of exposure is helpful, but not enough. It is here that home visits, with detailed investigation of the patient's entire environment, are often of the greatest importance. With the best coöperation, it is often possible to alter the child's room, cover the mattress, remove feathers, rugs, draperies, and other dust-collecting and producing substances. One may even be successful in having pets removed from the home. Sometimes, too, it may even be possible to control the child's activities in portions of the house not under "dust control." Such procedures cause interference to the family as well as economic hardship, and here we realize the value of skin testing. As a measure in helping to narrow down the substances to which the patient may be sensitive, and which, therefore, should receive the greatest emphasis, no other procedure is so helpful.

#### *Skin Testing.*

Most of us know the common fallacies in the interpretation of skin tests and all of us have learned that badly done or poorly interpreted tests are worse than none at all. I do not know at what age skin tests are first apt to be helpful, but am governed in their use entirely by necessity in working out the individual problem. The skin test is only used as an adjunct to the clinical findings. Scratch tests are done first. I should mention that, in infancy, small reactions should not be overlooked. If scratch tests are negative or inconclusive, intradermal tests are done. It is not necessary to do a large number of tests by either method. Repeated tests, however, may be necessary. I feel, as do many others, that positive scratch tests—with the exception of that for egg white—are more often of etiologic importance in the infant and young child than are intracutaneous reactions. While not necessary in all infants with eczema, skin testing at present certainly offers the best method for focusing our attention to a few substances as probable irritants for the individual exposed to many such irritants. When it is not possible to test the patient, passive transfer technique can be employed.

#### *Other Measures.*

Failure of improvement after the use of the previously mentioned procedures calls for a change of environment. Hospitalization often results in improvement, even though apparently the same technique is employed as that used in the home. It is difficult to explain this, unless some as yet unrecognized environmental factors are at fault. We have all too often seen the recurrence of the eczema following hospital discharge. I have not had any experience with potassium chlorid or with histaminase in the treatment of eczema. Other nonspecific methods have been frequently used without striking success.

#### *Eczema in Older Children.*

While mention has been made of the usual procedures in the management of eczema of both infant and child, the problem of persistent or chronic eczema deserves further notice. We frequently see

the infant whose skin does not entirely clear and in whom flexural surface eczema is of long standing. In addition, patients are seen with lesions starting in later childhood. These, too, are often limited to the flexural surfaces and neck, with occasional small patches on the trunk. More infrequently children are seen with face, neck, arms, and legs completely covered with a thick, scaly eruption which, at intervals, becomes vesicular and weeping. Other allergic symptoms, such as rhinitis or asthma, may be present; although skin tests may be positive omission of test-positive foods, and environmental control does not often result in improvement. Of course, the pollen dermatoses account for some of these cases, and other inhalant substances for others. It is in this group that the contact dermatitis is found, sometimes as suggested by Hill, superimposed on atopic dermatitis. Careful investigation of contact substances, plus patch tests, will reveal the cause of some of these. Frequently, however, the etiology is most baffling and the combined help of the dermatologist and allergist is most necessary. It is with these patients that I feel we must widen our scope of knowledge and make further effort to subclassify the cases before brilliant results can be expected.

#### SUMMARY

The eczemas of infancy and early childhood present an intriguing problem to the pediatrician. Much of our knowledge in handling these patients has come from combined efforts of pediatricist, dermatologist, and allergist. In the light of this knowledge, the procedures of utmost importance to simplify pediatric management are:

1. Proper classification of the eruption—upon which depends proper therapy.
2. Proper local treatment—all that is necessary in the mild and of great importance in the severe cases.
3. Careful and painstaking history—seeking clues dietary and environmental.
4. Skin testing, hoping to reveal the specific etiologic agent, but more often narrowing the focus of attention to a few substances.
5. Continual coöperation of physician, parents, and nurse.
6. Change in environment or hospitalization in severe cases and those failing to respond to previous measures.
7. Continued efforts in the direction of subclassifying the types and in searching for the, as yet, unrevealed mechanism of sensitization.

490 Post Street.

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## CLINICAL NOTES AND CASE REPORTS

### EPIDURAL AIR INJECTION: IN DIAGNOSIS OF SPINAL CANAL MASSES\*

By HENRY M. WEBER, M. D.

*Los Angeles*

**D**IAGNOSIS of masses and protrusions into the spinal canal is not technically simple with the present methods of radio-opaque materials and air injected into the subarachnoid space.

After extensive dissections of cadavers, which had been injected through the caudal canal with colored liquids into the epidural space, the feasibility of the use of air for visualization was considered.

Bodies of patients immediately after death were first employed to obtain conditions most nearly approaching the living physical state. Various amounts of air were injected into the epidural space via the sacral hiatus, using a spinal needle and a 50 cubic centimeter Luer syringe with an air-tight connection. Sixty to eighty cubic centimeters of air, slowly introduced, seemed to be the optimum amount to produce a satisfactory shadow in the lateral x-ray of the lumbar and lower thoracic spinal canal.

Two patients who were suffering from sciatic pain, not relieved by usual treatment, were then injected slowly with 75 cubic centimeters of air. In one case the spinal canal and dural sac were clearly outlined, while in the other—perhaps because of more rapid injection—some of the air had followed the roots of the nerves forming the lumbar plexus. It is also to be noted that both patients had much relief of pain, one for the first time in months. No untoward symptoms developed and both patients were up and about as usual the next day, and x-ray of the lumbar region did not reveal any air shadow.

This is a preliminary report. As opportunity is afforded, the proper x-ray technique must be developed and antero-posterior views will be studied. Whether results will be consistent remains to be seen. The technique, however, is extremely simple and should be without any ill effects.

613 South Catalina.

\* A preliminary report. Article received August 5, 1940.

### HIPPOCRATES' APHORISMS\*

By M. SCHOLTZ, M. D.

*Arcadia*

#### SECTION FOUR (Continued)

34. If a fevered sick without swelling of the throat  
Is caused quite suddenly to gasp and agonize,  
It is a dreadful sign of a coming quick demise.
35. If the neck of a person sick with fever  
Gets twisted suddenly out of line  
And, if the sick must labor hard to swallow,  
Though no swelling present, it's a fatal sign.
36. Sweats on the 5th, 7th, 9th, 14th, 17th,  
21st, 27th, and 29th febrile days  
Herald a favorable crisis,  
But others mean more pains, relapses and delays.
37. Cold sweats with acute fever  
Are oft a fatal sign,  
But milder fever means  
Long sickness, yet benign.
38. Wherever in the body  
Sweat may be localized.  
A morbid process in that part  
Is also organized.
39. Wherever in the body  
A part feels hot or cold,  
That part is the most likely  
The sickness-site to hold.
40. Whenever there are changes in the body  
And it feels alternately hot and cold  
And, if one color does succeed the other,  
It bodes that sickness will prolong its hold.
41. A copious sweat occurring after sleep,  
With no apparent cause, means too much food;  
But, if the sweat doesn't follow a meal,  
A purging's apt to do the patient good.
42. When copious sweats  
Run in a constant stream,  
Cold sweats more dangerous  
Than the hot would seem.
43. Remittent fevers which flare on the third day  
Are dangerous; but, if they turn  
To intermittent type,  
They are of less concern.
44. In lasting fevers  
Various joints  
For pains and nodes,  
Are deposit points.
45. When, after fevers, joints  
Are attacked by nodes and pain,  
It's proper that the sick  
His appetite restrain.
46. If in the course of a remittent fever  
The sick is seized with heavy chill,  
It is a sign of dire portent:  
The disease is grave and apt to kill.

413 Longden Avenue.

(To be continued)

\* For other aphorisms, see *CALIFORNIA AND WESTERN MEDICINE*, March 1940, page 125; April 1940, page 179; May 1940, page 231; July 1940, page 35; August 1940, page 85; September 1940, page 130; December, 1940, page 272.

# CALIFORNIA MEDICAL ASSOCIATION

This department contains official notices, reports of county society proceedings and other information having to do with the State Association and its component county societies. The copy for the department is submitted by the State Association Secretary, to whom communications for this department should be sent. Rosters of State Association officers and committees and of component county societies and affiliated organizations, are printed in the front advertising section on pages 2, 4 and 6.

## CALIFORNIA MEDICAL ASSOCIATION†

HARRY H. WILSON.....President  
HENRY S. ROGERS.....President-Elect  
LOWELL S. GOIN.....Speaker  
PHILIP K. GILMAN.....Council Chairman  
GEORGE H. KRESS.....Secretary and Editor

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### OFFICIAL NOTICES

#### Proposed Amendments to the Constitution of the California Medical Association

At the thirty-seventh annual session of the House of Delegates, held at Hotel Coronado, May 6, 1940, seven amendments to the Constitution were submitted. Proposed amendments, listed below under captions I to V, were submitted by John W. Cline of San Francisco (noted in printed minutes in CALIFORNIA AND WESTERN MEDICINE, June, 1940, on page 266), and amendments having numbers VI and VII were presented by E. T. Remmen of Los Angeles (noted in printed minutes in CALIFORNIA AND WESTERN MEDICINE, June, 1940, on page 272. Error in use of John D. Ruddock's name in electric recorder transcription was corrected in CALIFORNIA AND WESTERN MEDICINE, December, 1940, on page 273.

Procedure to be followed in consideration of proposed amendments is outlined in Article XV, Section 1, as follows:

#### ARTICLE XV.—AMENDMENTS

##### SECTION 1.—Procedure to Amend Constitution

Any member of the House of Delegates at any meeting of any regular annual session thereof may present an amendment or amendments to any article or articles or any section or sections of any article or articles of this Constitution.

Such proposed amendment or amendments shall be in writing and shall be filed with the Secretary and shall thereafter be published at least twice in separate issues of the OFFICIAL JOURNAL of this Association prior to the next regular session of the House of Delegates.

At the said next regular session of the House of Delegates, such proposed amendment or amendments shall be

† For complete roster of officers, see advertising pages 2, 4, and 6.

submitted to the House of Delegates, for consideration at any meeting of the House of Delegates during that annual session, and if two-thirds of the delegates present and voting vote in favor thereof the same shall be adopted.

Proposed amendments submitted by Dr. John W. Cline:

#### PROPOSED AMENDMENT TO CONSTITUTION: NO. I

*Resolved*, That Section 1(b) of Article V of the Constitution of this Association, California Medical Association, be and the same hereby is amended by inserting before the period and after the word "Constitution" the following: "excepting the Secretary-Treasurer and Editor," so that said Section 1 (b) of Article V shall hereafter read as follows:

(b) The officers of this Association enumerated in Section 1 of Article X of this Constitution, excepting the Secretary-Treasurer and Editor.

That is an amendment to the Constitution.

#### PROPOSED AMENDMENT TO CONSTITUTION: NO. II

Another amendment to the Constitution:

*Resolved*, That Section 8 of Article VII of the Constitution of this Association, California Medical Association, be and the same hereby is amended by inserting after the comma which follows the words "Public Relations," the following: "and ex officio, but without the right to vote," so that said Section 8 of Article VII will hereafter read as follows:

#### SECTION 8.—Executive Committee

The Executive Committee shall consist of the President, the Past President, the President-Elect, the Speaker of the House of Delegates, the Chairman of the Council, the Chairman of the Auditing Committee, the Chairman of the Committee on Public Relations, and ex officio, but without the right to vote, the Secretary-Treasurer and the Editor.

#### PROPOSED AMENDMENT TO CONSTITUTION: NO. III

Another amendment to the Constitution:

*Resolved*, That Section 11 of Article X of the Constitution of this Association, California Medical Association, be and the same hereby is amended by striking out of said Section 11 the following:

#### SECTION 11.—Election of Council Chairman; Council Vice-Chairman; Secretary-Treasurer; Editor and Associate Editors

The Council, at the organization meeting thereof, shall elect a Chairman, a Vice-Chairman, a Secretary-Treasurer, an Editor; and, in its discretion, one or more Associate Editors, each to serve for the term of one year, and by inserting in lieu thereof the following:

#### SECTION 11.—Election of Chairman and Vice-Chairman of Council; Employment of Secretary-Treasurer, Assistant Secretaries, Editor and Associate Editors

The Council, at the organization meeting thereof, shall elect a Chairman and a Vice-Chairman, each to serve for the term of one year. It shall also employ, if any vacancy exists, a Secretary-Treasurer and an Editor, and, in its discretion, one or more Assistant Secretaries or Associate Editors. The terms of their employment shall be such as are satisfactory to the Council, provided, however, that no contract of employment shall, by its terms, exceed a period of three years from the date of the organization meeting at which such contract is authorized.

#### PROPOSED AMENDMENT TO CONSTITUTION: NO. IV

Another:

*Resolved*, That Section 12 of Article X of the Constitution of this Association, California Medical Association, be and



the same hereby is amended by striking out all of said Section 12 reading as follows:

**SECTION 12.—Qualifications of Secretary-Treasurer and Editor**

No person shall be eligible to the office of Secretary-Treasurer or Editor or Associate Editor who does not hold the degree of Doctor of Medicine, but membership in this Association shall not be a necessary qualification for the offices of Secretary-Treasurer, Editor, or Associate Editor.

and by inserting in lieu thereof the following:

**SECTION 12.—Qualifications of Secretary-Treasurer and Editor**

The Secretary-Treasurer, the Editor, Assistant Secretaries and Associate Editors may, but need not, hold the degree of Doctor of Medicine, and may, but need not, be members of this Association.

**PROPOSED AMENDMENT TO CONSTITUTION: NO. V**

An amendment to the Constitution:

*Resolved*, That Section 1 of Article VII of the Constitution of this Association, California Medical Association, be and it hereby is amended by striking out of the first paragraph of said Section 1 the following: "and the Chairman of the Committee on Public Relations" so that the said first paragraph of Section 1 of Article VII will hereafter read as follows:

The Council shall consist of the Councilors and ex officio: the President, the Past President, the President-Elect, and the Speaker of the House of Delegates, each with all the rights of a Councilor.

and be it further

*Resolved*, That Section 8 of Article VII of the Constitution of this Association be and the same hereby is amended by striking out of said section the following: "the Chairman of the Committee on Public Relations," so that said Section 8 of Article VII will hereafter read as follows:

The Executive Committee shall consist of the President, the Past President, the President-Elect, the Speaker of the House of Delegates, the Chairman of the Council, the Chairman of the Auditing Committee, the Secretary-Treasurer, and the Editor.

and be it further

*Resolved*, That Section 1 of Article X of the Constitution of this Association be and the same hereby is amended by striking out of said Section 1 the following: "the Chairman of the Committee on Public Relations," so that said Section 1 of Article X will hereafter read as follows:

The officers of this Association shall be a President, a Past President, a President-Elect, a Secretary-Treasurer, a Speaker of the House of Delegates, a Vice-Speaker of the House of Delegates, an Editor and fifteen Councilors (six of the fifteen Councilors being elected as at large and nine from Councilor Districts, as herein provided).

and be it further

*Resolved*, That Section 4 of Article X of the Constitution of this Association be and the same hereby is amended by striking out of the first paragraph of said Section 4 the following: "and Chairman of the Committee on Public Relations," so that the first paragraph of said Section 4 shall hereafter read as follows:

The President, Past President, President-Elect, and Speaker of the House of Delegates shall be ex officio members of the Council with all the rights of Councilors.

and be it further

*Resolved*, That the Constitution of this Association be and the same hereby is amended by striking out all of Section 15 of Article X of said Constitution.

Proposed amendments submitted by Dr. E. T. Remmen:

**PROPOSED AMENDMENT TO CONSTITUTION: NO. VI**

*Resolved*, That Section 4 of Article V of the Constitution of this Association, California Medical Association, which is entitled "Terms of Delegates and Alternates; One-Half Elected Each Year," be and the same hereby is amended to read as follows:

Delegates and alternates shall be elected by the several component county societies, respectively, for a term of two years; one-half of the delegates and alternates representing each component county society, as near as may be, shall be elected each year, provided that, in order to equalize the number of delegates elected each year, where at present the inequality in number is greater than one, a component county society may elect

a sufficient number of delegates for a term of one year to equalize future elections in such society. Delegates and alternates shall be elected directly at regular elections by the members of each component county society by an equitable method to be selected by each society, and shall not be elected or appointed by the Council, Board of Directors or Trustees or other governing body or by any officers or officer thereof, except to fill vacancies occurring between such regular elections; any delegate or alternate so selected to fill such a vacancy shall serve only until his successor shall have been duly elected.

**PROPOSED AMENDMENT TO CONSTITUTION: NO. VII**

The second resolution:

*Resolved*, That Section 1 of Article X of the Constitution of this Association, California Medical Association, be amended by adding to said section a new paragraph reading as follows:

No member who holds any office in a component county society and who is elected as an officer of this Association (except the Vice-Speaker of the House of Delegates and the Editor) shall be eligible to serve as such officer of this Association unless he shall, forthwith upon his election, resign any of the offices hereafter set forth held by him in a component county society; and, in the event that he fails to do so, the Council, at its first meeting after such election, shall declare vacant the office of this Association to which he has been elected. The offices of a component county society from which such an officer-elect of this Association must resign are: President, Vice-President, Secretary, Treasurer, Councilor, Director, Trustee or any other office however entitled, the powers and duties of which would customarily include a substantial part of the powers and duties of any of said named offices.

**ABSTRACT OF MINUTES: CALIFORNIA MEDICAL ASSOCIATION EXECUTIVE COMMITTEE\***

*Minutes of the One Hundred Seventy-Second Meeting of the Executive Committee of the California Medical Association, Held in San Francisco, Friday, December 13, 1940*

**1. Roll Call.**

Present: Doctors Dukes (chairman), Rogers, Gilman, Cline, and Kress.

**2. Minutes.**

Minutes of the meeting held on October 21, 1940, were approved.

**3. Financial.**

(a) *Budget*.—Dr. John W. Cline submitted the Auditing Committee's prospective budget for the calendar year 1942 (By-Laws: Chapter IV, Section 5, page 36). The items thereon were discussed and after revision were accepted for submittal by the Executive Committee to the Council.

(b) *Cancer Commission*.—Upon request from the California Medical Association Cancer Commission it was voted to recommend to the Council that the 1941 budget of the Cancer Commission be increased from \$500 to \$1,000.

(c) *Needy Physicians Fund*.—A donation of \$10 to the Needy Physicians' Fund was ordered placed under that name as a separate item in the financial records.

**4. Committee on Scientific Work.**

Vacancy on the Committee on Scientific Work, caused by the death of Lemuel P. Adams of Oakland, was filled by appointment of Fletcher B. Taylor of Oakland.

**5. California Industrial Accident Commission Ruling: Re Medical and Hospital Records.**

The October 16, 1940, ruling of the State Industrial Accident Commission concerning inspection of medical and hospital records and the correspondence relating thereto,

\* Full minutes of the Executive Committee meeting have been mailed to all councilors, and copies are also available for inspection in the central office of the Association.

as printed in CALIFORNIA AND WESTERN MEDICINE, December, 1940, on page 273, were discussed. It was agreed that further report thereon should be made to the Council.

#### 6. Committee on Public Health Education.

Approval was given to the appointment of Dr. George H. Rohrbacher, Stockton as a member of the Committee on Public Health Education, vice Dewey R. Powell, resigned.

#### 7. Associated Hospital Service of Southern California.

Council Chairman Gilman reported on a conference held by him with officers of the Associated Hospital Service of Southern California, stating that the organization was agreeable to the institution of procedures regarding laboratory and x-ray work, provided that each of the three non-profit hospital organizations adopted the same rules. Doctor Gilman was authorized to continue the conferences in efforts to attain that objective.

#### 8. Medical Preparedness: Fee Table for Adjutant General.

Doctors Gilman and Dukes reported on fee tables for laboratory and x-ray work carried on in connection with selective service work. It was voted that copies be sent to Colonel Bert S. Thomas, chief of the medical service in the California Adjutant General's department.

#### 9. Industrial Accident Commission Hearings.

Dr. John W. Cline called attention to protests recently submitted by the California State Federation of Labor, dealing with the rights of citizens who had been injured in industrial employment, to choose their own physicians. Doctor Cline and his committee were requested to continue the conferences and submit a report thereon to the Council.

#### 10. Audits.

The usual audits by certified public accountants were authorized.

CHARLES A. DUKES, *Chairman*.  
GEORGE H. KRESS, *Secretary*.

### NEXT ANNUAL SESSION

Hotel Del Monte, May 5-8, 1941

#### SCIENTIFIC ASSEMBLY

#### Programs of Scientific Sections: Notice to Essayists

Members of the California Medical Association who wish to offer papers or presentations at the next annual session must submit their requests to the secretary of the Scientific Section before which they desire to appear, and if they have not done so, should do this immediately.

The roster of section officers appears at the top of advertising page 6, in each issue of CALIFORNIA AND WESTERN MEDICINE. The final draft of the scientific programs will probably be made in January. List of scientific sections follows:

#### SCIENTIFIC SECTIONS

General Medicine  
General Surgery  
Obstetrics and Gynecology  
Eye, Ear, Nose and Throat  
Anesthesiology  
Dermatology and Syphilology  
Industrial Medicine and Surgery  
Neuropsychiatry  
Pathology and Bacteriology  
Pediatrics  
Radiology  
Urology

#### Scientific Exhibits at the Annual Session

Organizations and members who desire to present scientific exhibits at the annual session to be held in Del Monte, May 5-8, 1941, should promptly communicate with the chairman of the Committee on Scientific Work, Dr. George H. Kress, 450 Sutter Building, San Francisco.

#### Film Presentations at the Annual Session

California Medical Association members who have produced medical films are cordially invited to communicate with the Committee on Scientific Work. Present plans contemplate the presentation of films on medical and surgical topics and procedures on each of the four mornings of the annual session. Definite times will be set for the films, to be presented on the hours and half-hours of each morning. The large Copper Cup Room of the Hotel Del Monte will be used for these presentations.

#### HOTELS: DEL MONTE AND VICINITY

The official headquarters of the next annual session will be the Hotel Del Monte. Because of the large attendance, the facilities of other hotels must also be used.

All requests for reservations must be sent to the hotels direct. In writing, it is well to state the number in the party, date of arrival, date of departure, nature of accommodations (single room, double room, double bed, twin beds, bath) desired.

A partial list of hotels on the Monterey peninsula follows:

#### Hotel Del Monte, Del Monte

Carl S. Stanley, Manager

##### East Wing

Single room without bath, one person.....	\$7.50
Double room without bath, two persons.....	7.00
Single room with bath, one person.....	8.50
Double room with bath, two persons.....	7.50
Two single rooms, bath between, two persons.....	8.00
Two double rooms, bath between, four persons.....	7.00

##### Main Building, Cottages, Remodeled West Wing

Single room with bath, one person.....	9.50
Double room with bath, two persons.....	8.50
Sitting room.....	8.00

All above rates are on the American Plan of service, which includes meals.

#### Del Monte Lodge, Pebble Beach

Same management as Hotel Del Monte, Del Monte, Calif. Ashton Stanley, Resident Manager

The Lodge is located approximately five miles from the Del Monte Hotel, overlooking the ocean.

Accommodations available. Rates are quoted for the period of the meeting of the California State Medical Association being held at Del Monte Hotel May 5, 6, 7 and 8, 1941, as follows:

Single room and bath.....	\$9.50 per day per person
Double room and bath.....	8.50 per day per person
Sitting room.....	8.00 per day additional

American Plan of service, which includes meals.

Can accommodate approximately 60 persons.

#### Highlands Inn, Carmel

E. H. Tickle, Manager

Located four miles south of Carmel, California, perched on a rugged cliff overlooking the Pacific Ocean.

Main building and chalet accommodations.

Situated about seven miles from Del Monte; quiet location, comfortable and modern rooms.

About 20 rooms available. Rates quoted for the period of the California Medical Association meeting being held at Del Monte Hotel May 5, 6, 7 and 8, 1941, as follows:

Single room with bath.....	\$4.00 and \$4.50 per day
Double room (double bed).....	5.00 per day
Double room (twin beds).....	6.00 per day

Can accommodate approximately 25 couples.

#### Meal Rates

Breakfast, 75 cents; luncheon, \$1.00; dinner, \$1.25.

European Plan of service.

#### Forest Hill Hotel, Pacific Grove

S. S. Parsons, Manager

Located in Pacific Grove, California, approximately four miles from Del Monte. Situated in residential section of Pacific Grove; quiet, family-type hotel.

Between 40 and 50 rooms available. Rates quoted for the period of the California State Medical Association meeting

being held at Del Monte Hotel, May 5, 6, 7 and 8, 1941, as follows:

#### European Plan

Single room with bath.....	\$2.50 per day
Double room with bath (double bed).....	4.00 per day
Double room with bath (twin beds).....	5.00 per day

#### Dining Room

Breakfast, à la Carte

Luncheon, 65 cents; dinner, 85 cents and \$1.00

Garage, 35 cents per day

Can accommodate approximately 100 persons.

#### Mission Inn, Monterey

Herbert J. Fisher, Resident Manager

Located in the heart of Monterey; one mile from Hotel Del Monte

Accommodations available. Rates quoted for the period of the California State Medical Association meeting being held at Del Monte Hotel May 5, 6, 7 and 8, 1941, as follows:

10 rooms with double beds and bath.....	\$3.00 single 4.00 double
5 rooms with twin beds and bath.....	5.00 double

A few large suites accommodating from three to five persons..... 1.50 to 2.00 per person  
Can accommodate approximately 40 guests.  
European Plan of service.

#### Asilomar, Pacific Grove

Paulsen and Dave Visel, Managers

Asilomar is located in Pacific Grove, California, about six miles from Del Monte Hotel. It is ideally situated near the ocean, and is a moderate-priced, family, resort hotel. Facilities for all types of sports are available; swimming pool, tennis courts, badminton courts, valley ball, baseball, basketball, etc. Ten minutes by car from Del Monte. Accommodations available. Rates quoted for the period of the California State Medical Association meeting being held at Del Monte Hotel May 5, 6, 7 and 8, 1941, as follows:

#### European Plan

16 double rooms, each with private bath and shower, accommodating 32 persons, per person.....	\$4.00
20 single rooms, each with connecting toilet and shower, accommodating 20 persons, per person.....	3.00
10 double rooms, each with connecting toilet and shower, accommodating 20 persons, per person.....	2.50
7 single rooms, each with connecting toilet, accommodating 7 persons, per person.....	2.25
6 double rooms, each with connecting toilet, accommodating 12 persons, per person.....	2.00
5 single rooms, each with running water, bath facilities nearby, accommodating 5 persons, per person.....	2.00
30 double rooms, each with running water, bath facilities nearby, accommodating 60 persons, per person.....	2.75
10 triple rooms, each with running water, bath facilities nearby, accommodating 30 persons, per person.....	1.50
Can accommodate 186 persons.	

The above mentioned accommodations are located in the Hill Top, Scripps, Lodge, and Guest Inn. These buildings are all heated, each has its own lounge and open fireplace, and all rooms, except four doubles in Scripps, have twin beds.

#### Meal Rates

Breakfast, 30 to 60 cents; luncheon, 50 to 95 cents; dinner, 75 cents to \$1.00.

#### La Playa Hotel, Carmel

Frederick M. Godwin, Managing Owner

Located in the heart of Carmel, only a short distance from the beach, and about five miles from Del Monte.

A modern, quiet hotel.

About twenty to thirty rooms available, each room with bath. About two-thirds of the rooms are doubles, and one-third singles. Rates quoted for the period of the California State Medical Association meeting being held at Del Monte Hotel May 5, 6, 7 and 8, 1941, as follows:

#### Continental Plan

Single rooms—Lodging and breakfast.....	\$4.00 to \$ 6.00
Ocean view rooms start at \$5.00	
Double rooms—Lodging and breakfast.....	\$8.00 to \$10.00
Ocean view rooms start at \$9.00	

About forty of these rooms are equipped with twin beds and ten with double beds.

Can accommodate approximately 90 persons.

#### Pine Inn, Carmel

Harrison Godwin, Managing Owner

Located in the heart of Carmel, about five blocks from the beach. Quiet, modern, family hotel.

Accommodations available. Rates quoted for the period of the California State Medical Association meeting being held at Del Monte Hotel May 5, 6, 7 and 8, 1941, as follows:

#### American Plan

Single room without bath.....	\$4.50
Double room without bath.....	7.00
Single room with bath.....	\$5.00 to 6.00
Double room with bath.....	8.00 to 12.00

#### European Plan

Single room without bath.....	2.50
Double room without bath.....	3.00
Single room with bath.....	\$3.00 to 5.00
Double room with bath.....	3.50 to 7.00

#### Monterey Hotel, Monterey

Robert C. MacChesney, Manager

Small, commercial hotel, located in the heart of Monterey, California; one mile from Hotel Del Monte

About forty-two rooms available. Rates quoted for the period of the California State Medical Association meeting being held at Del Monte Hotel May 5, 6, 7 and 8, 1941, as follows:

#### European Plan

2 rooms with twin beds and bath.....	\$4.00 double
3 suites (2 rooms, each with bath, adjoining) double bed in each room.....	6.50—4 persons
2 suites (2 rooms with double bed in each room, bath adjoining the two rooms).....	6.50—4 persons
5 rooms with double bed and bath, each person \$2.50.....	3.50 double
7 rooms with double bed and bath, each person \$3.00.....	3.50 double
1 room with double bed and shower, each person \$2.50.....	3.00 double
20 rooms with double bed, no bath, each person \$1.50.....	2.00 double

The rooms are all double; therefore, they can accommodate approximately 75 persons.

#### Hotel San Carlos, Monterey

Peter W. C. Watson, Managing Director

Located in the heart of Monterey, California, one mile from Hotel Del Monte. First-class, commercial type hotel, modern in every way.

About 110 rooms available. Rates quoted for the period of the California State Medical Association meeting being held at Del Monte Hotel May 5, 6, 7 and 8, 1941, as follows:

#### European Plan

20 rooms with twin beds, per day.....	\$6.00 and \$7.00 double
45 rooms with double beds and tub bath.....	{ 3.00 single 4.50 double
45 rooms with double beds and shower bath.....	{ 2.50 single 3.50 double

## CALIFORNIA COMMITTEE ON MEDICAL PREPAREDNESS†

The Committee on Medical Preparedness of the California Medical Association, through its chairman, Dr. Philip K. Gilman, recently sent to the component county societies the letter which follows. The letter was drafted after conferences held with the medical officers in command for the Ninth Corps Area. In connection with other

† Philip K. Gilman, M. D., 2000 Van Ness Avenue, San Francisco, is chairman of the California Committee on Medical Preparedness. Charles A. Dukes, M. D., 426 Seventeenth Street, Oakland, is a member of the American Medical Association Committee on Medical Preparedness. Roster of county chairmen on Medical Preparedness appeared in CALIFORNIA AND WESTERN MEDICINE, August, 1940, on page 86.

For editorial comment, see page 1.



information given in this issue, the need for the communication is understood.

(COPY)

CALIFORNIA MEDICAL ASSOCIATION  
San Francisco, December 23, 1940.

To the Presidents of the  
Component County Societies.

Dear Doctors:

The United States Army has called on the California Medical Association to aid in the burden of supplying close to three hundred doctors for hospitals to be staffed as part of the work of the present draft law. The Army is building six hospitals in various California cities, for which staffs of from twenty-five to seventy-three doctors each will be needed.

Doctors in all types of practice are required—general medicine, surgery, and all the specialties.

Frankly, I need your help in this matter. The Association has not the necessary information on the doctors of the entire state to determine whether or not they are available for Army service for a period of one or more years; you, as president of your local society, are in a much better position than I to locate men in your area who might be persuaded to accept Army Medical Corps work. Our goal right now is one hundred men in the next thirty days.

Any doctor who has registered under the Selective Service Act would be well advised to take an Army commission now and thus continue his medical work, rather than to wait for a draft call which might place him as a private in some type of work for which he is not trained and which would retard the development of his medical skill. Any other doctor who could arrange his affairs so as to serve with the Army at this time will also be assisting this work greatly. Holders of commissions in the Medical Reserve Corps might well be willing to enter active service now rather than wait for a call.

With these thoughts in mind, may I ask you to canvass the membership of your society and locate any doctors who might be available for Army service in the immediate future or within the next few months.

Please let me know as soon as possible the names of any doctors you can locate in your society for Army service. If you or they have any questions on the matter, pass them along and I will see that they are answered immediately.

This is an extremely important situation, and I am counting on your help to solve it in a manner that will do credit to the Association.

Four Fifty Sutter.

Fraternally yours.

(Signed): P. K. GILMAN, M. D.,  
Chairman, California Committee on  
Medical Preparedness.

\* \* \*

#### Conference: Re Local Draft Board Assignments

On Thursday, December 19, Dr. Harold A. Fletcher, chairman of a special committee of the San Francisco County Medical Society, called a meeting at which were present: Colonel Bert S. Thomas and staff of the California Adjutant General's medical department; Doctors Harold L. Fletcher, H. Glenn Bell, Carleton Mathewson, Jr., Emile Holman, J. Marion Read, and Alson R. Kilgore, for the San Francisco County Medical Society; and Doctors Philip K. Gilman, Charles A. Dukes, George H. Kress, and Mr. John Hunton for the California Medical Association.

The special purpose of the meeting was to learn what are the responsibilities of component county medical societies in providing the Adjutant General's department with names of physicians in civil practice who would be willing to aid in the medical examinations of draftees of those local selective service boards, where the amount of work ahead was more than could be expected from the existing medical personnel.

In the beginning, all selective service board appointments were made upon final recommendation of Governor Culbert L. Olson, who, as regards the 284 local boards, had deputized a Superior Court judge in each county to submit names for the local boards of the district. Because the number of draftees in the California boards has considerable variation, it has been found that more than one medical examiner is needed in many cases.

It was agreed that Doctor Fletcher's committee would provide additional medical aid where indicated.

Similar problems have arisen in other parts of the state.

\* \* \*

#### Table 1.—Station Hospital, Zone of Interior

The large table on page 33 gives information concerning medical officer personnel attached to hospitals, having bed capacities from 100 to 2,000. Army Hospitals in California, with bed capacities, are: Camp Ord, 1,500; Nacimiento, 1,000; San Luis Obispo, 1,000; Santa Barbara, 750; Riverside, 500; Torrey Pines, 400.

\* \* \*

#### Military Hospitals in California

Abstract of minutes of the conference held in the office of the Commanding Officer of the Ninth Corps Area at the Presidio, San Francisco, on Tuesday, December 10, 1940.

Present were Colonels Peery, Corby, Myers, and McCornack, and Doctors Dukes, Gilman, and Kress.

Special subject of discussion was the consideration of ways and means whereby the selective service hospitals now in process of erection or projected should be medically staffed.

The hospitals thus far announced for the Ninth Corps Area with prospective bed capacity, are as follows:

For California	Bed Capacity
<i>Camp</i>	
Camp Ord, Monterey .....	1,500
Nacimiento, Hearst Ranch .....	1,000
San Luis Obispo .....	1,000
Santa Barbara .....	750
Torrey Pines .....	400
Aviation Training, Riverside .....	500
<i>For Washington</i>	
Fort Lewis .....	2,000
Vancouver .....	750

Concerning the staff organization for these hospitals, it was stated that each hospital would have a surgical service and a medical service, with a medical officer in charge of each of these two major services.

Specialty divisions would be in charge of section chiefs who would be allocated to and be under the general supervision of the chiefs of the surgical and medical services.

It was stated that by January 20, it was hoped to have the hospitals at San Luis Obispo, at Camp Ord, and at Riverside, sufficiently under way to take over hospital work.

Concerning medical reserve corps officers, it was stated that colonels, lieutenant-colonels, and majors were not permitted to resign, but a statement in *The Journal of the American Medical Association*, of December 7, 1940, on page 2008, was correct, wherein it stated that at the Chicago conference, recently held in the American Medical Association headquarters, General Love of the Army Medical Corps had stated that any reserve officer below the grade of captain, prior to assignment to duty, had the right to resign as a reserve medical corps officer.

The medical officers of the Ninth Corps Area were anxious to receive information concerning the qualifications of men who were members of the medical reserve corps or who were in civil practice, to the end that the staffing of the Government hospitals would be maintained up to the standards of accredited civil and military hospitals.

Presidio officers expressed themselves as desirous of cooperating as fully as possible with the medical profession, but felt that the standards of the Government hospitals must be properly maintained.

Under the caption, "Table 1.—Station Hospital, Zone of Interior," appearing in this department of CALIFORNIA AND WESTERN MEDICINE, appears a table showing tentative allocation of staff personnel in hospitals of different size.

TABLE 1—Station Hospital, Zone of Interior

(Column Reference Numbers*)		(Tenative, Subject to Change)																	
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
1	UNIT (Bed Capacity)	100	150	200	250	300	350	400	450	500	600	700	750	800	900	1000	1500	2000	
2	Colonel	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Commanding officer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Lieutenant Colonel	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Commanding officer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Executive officer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	Chief of medical service	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Chief of surgical service	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Chief of dental service	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	Major	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Commanding officer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Sanitary inspector	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Assistant registrar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14	Assistant registrar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15	Fire marshal	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	Mess officer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17	Chaplain	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18	Chief of medical service	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19	Asst. chief of med. service	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	Gastro-enterologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21	Neuropsychiatrist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22	Internist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23	Cardiologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	Communicable disease	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25	Officers' Section	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26	Chief of surgical service	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27	Asst. chief of surg. service	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28	Orthopedist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29	Urologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30	Oculist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31	Otorhinolaryngologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32	Septic surgeon	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33	General surgeon	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34	Chief of dental service	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35	Asst. chief of dental service	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36	Clinical pathologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37	Radiologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38	Captain	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39	Adjutant	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40	CO DMD (MAC)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41	Adjutant	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42	Mess officer (MAC)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43	Medical supply officer (MAC)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44	Tuberculosis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45	Neuropsychiatrist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46	Urologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47	Dermatologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48	Internist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49	Cardiologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
50	Contagious disease	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
51	General operating surgeon	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
52	Oculist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
53	Otorhinolaryngologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
54	E. N. & T.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
55	Ward officer (med.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
56	Ward officer (surg.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
57	Oral surgeon	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
58	Urologist and dermatologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
59	Anesthetist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60	Oral surgeon	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
61	Prosthetist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62	Clinical pathologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63	Radiologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
64	First lieutenant	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
65	Adj. and fire marshal (MAC)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66	Adj. and fire marshal	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67	Registrar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68	Registrar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69	Assistant registrar (MAC)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70	CO DMD (MAC)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71	Assistant DMD (MAC)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72	Assistant ward officer (med.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73	Assistant ward officer (surg.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74	Prosthetist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
75	General operator (dental)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
76	Clinical pathologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
77	Mess officer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
78	Medical supply officer (MAC)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
79	Second lieutenant	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80	Assistant adjutant (MAC)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
81	Asst. med. supply (MAC)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
82	Assistant mess (MAC)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
83	Medical supply (MAC)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
84	Total commissioned	10	14	17	21	23	26	29	32	37	41	45	50	54	57	61	78	97	

The distribution of personnel indicated herein is advisory; considerable variation being left to the discretion of the commanding officer of the hospital. MAC—Medical Administrative Corps (may be laymen), CO—Commanding Officer, DMD—Department Medical Detachment (need not be an M.D.).

### Occupational Deferments in Selective Service

A recent bulletin from the National Headquarters of the Selective Service System, Washington, D. C., gives the following information (excerpts):

Sounding a note of caution to employers and workers alike not to become "unduly anxious" about occupational deferment of employees from training under the Selective Service Act, C. A. Dykstra, director of Selective Service, assured them that "for the greatest interest of the nation" production of necessary materials will be given preference over manpower requirements as its armed forces are increased.

Mr. Dykstra said: "Don't be anxious or hasty regarding occupational deferments. Be patient. Full information will be available for all concerned in ample time. The Act, the Regulations and the whole Selective Service System provide all necessary provisions and procedures to safeguard the interests of workers, of employers, the local community, the families of registrants and the interests of the nation as a whole."

Mr. Dykstra emphasized that occupational deferments, each of which will be determined on an individual basis, rest with the local boards having jurisdiction of the 17,000,000 Selective Service registrants and not with National Headquarters of the Selective Service System. While National Headquarters is vitally interested in keeping key men in essential jobs, Mr. Dykstra pointed out that it cannot under any circumstances interfere with a local board's inalienable right to decide whether its individual registrants should be deferred because of civilian occupations.

Employers desirous of obtaining information concerning deferments may obtain copies of Volume III, Selective Service Regulations, pertaining to classification from the Superintendent of Documents, Washington, D. C., Mr. Dykstra said and added that they may consult State Advisors on Occupational Deferments now and local boards after the National Lottery.

Mr. Dykstra said:

"It is a basic principle of Selective Service at this stage of the national defense preparation that material procurement is paramount. Therefore, where two requirements—military manpower vs. production-conflict, production should have priority."

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### Conference on Military Medicine: At San Diego

A local committee of the San Diego County Medical Society, Dr. F. E. Toomey, chairman, contemplates a two-day symposium on military medicine, the same to be given in conjunction with the Committee on Postgraduate Activities of the California Medical Association. More concerning the program appears in this issue on page 38.

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### Pay and Allowances of Majors, Captains, and Lieutenants in United States Army

The annual base pay and allowance for quarters, and subsistence for the three lowest commissioned ranks in the Army Medical Corps are as follows:

Medical Corps	Base Pay	Quarters	Subsistence	Total
First lieutenant <sup>1</sup>	\$2,000	\$720	\$432	\$3,152
First lieutenant <sup>2</sup>	2,000	480	216	2,696
Captain <sup>1</sup>	2,400	960	432	3,792
Captain <sup>2</sup>	2,400	720	216	3,336
Major—less than 14 years' service	Same as captain			
Major—over 14 years' service <sup>1</sup>	3,000	1,848 (subs. inc.)		4,848
Major—over 14 years' service <sup>2</sup>	3,000	720	216	3,936

<sup>1</sup> With dependents.

<sup>2</sup> Without dependents.

\* \* \*

### Modern Warfare Will Increase Incidence of "Soldier's Heart"

Adequate examination should make possible the institution of preventive or early treatment measures for neurocirculatory asthenia or "soldier's heart," one of the most frequent causes of invalidism among soldiers, *The Journal of the American Medical Association* declares in an editorial which points out that modern warfare will also make the condition widespread among civilians.

The condition is a syndrome or set of symptoms occurring together. It is characterized, *The Journal* points out,

"by labored breathing, fatigue and exhaustion, palpitation or heart consciousness, fainting, giddiness, sweating, blueness or mottled coloring of the hands and a variety of neurovascular (nerve and blood vessel) phenomena. The pulse at rest and in sleep is normal, but is easily accelerated by emotion or exercise and is abnormally slow in its return to normal after exercise. Blood pressure is as a rule normal at rest, but exhibits the same exaggerated response to exercise and emotion as does the pulse. The electrocardiogram (graphic tracings of the electric current produced by the contraction of the heart muscle) does not reveal any structural changes. The symptom phosphaturia (high percentage of phosphates in the urine), so commonly observed in neurotic patients, is common especially after light exercise."

The editorial says:

"The appearance of the second edition of Sir Thomas Lewis's 'The Soldier's Heart and the Effort Syndrome' focuses the attention of physicians once more on one of the most frequent causes of invalidism among soldiers. 'Soldier's heart,' 'the irritable heart of soldiers,' 'disturbed action of the heart,' 'effort syndrome,' and 'neurocirculatory asthenia' is not a disease. It is rather a complex of characteristic neurovascular symptoms, which occur with sufficient regularity to justify grouping into a definite syndrome. This condition is not an organic disease of the heart or a clinical entity with definite pathologic (disease) appearances. Neither is it peculiar to war conditions. Modern warfare with all its horrors, the physical and emotional strain and the constant fear of death which it invokes is bound to reap a rich harvest of victims of neurocirculatory asthenia. The extension of the horrors of war to the civilian population multiplies the cases beyond measure. In the war of 1914-1918, Sir Thomas Lewis states, for every four wounded there was one cardiovascular (heart and blood vessel) case in the British Expeditionary Force. Seventy thousand had reported sick and were classed as cardiovascular by the summer of 1918, and 44,000 soldiers with effort syndrome (neurocirculatory asthenia) became pensioners. Actually no more than one out of six of these soldiers suffered from disease of the heart. The rest represented cases of 'effort syndrome.'

"To differentiate the condition from organic disease of the heart," the editorial continues, "the English classified these cases as 'disturbed action of the heart (D. A. H.).' The effect of suggesting 'something wrong with the heart' in a condition of undoubted neurogenic (originating in the nervous system) character had anything but a salutary effect on the patients. For this reason, and because the symptoms resembled those of fatigue following effort in normal persons, Lewis gave it the name 'effort syndrome.' The name 'neurocirculatory asthenia' was suggested by a team of medical reserve corps officers of the American army sent to Colchester, England, to study the condition with Sir Thomas Lewis. They felt that the symptoms comprising effort syndrome in normal persons are not exactly the same as those observed in neurocirculatory asthenia.

"While the basic mechanism of neurocirculatory asthenia has not been elucidated, the tendency of students of the syndrome is to regard it as psychogenic (originating in the mind)—a functional disorder of the autonomic (involuntary) nervous system. Given a neuropathic (nervous disorder) predisposition based on hereditary and constitutional inadequacy, many factors can assume the rôle of exciting or initiating agents. Among these, infectious or physical agents and the psychic (mental) strain of war are most important.

"The diagnosis of the syndrome presents few difficulties. Its differentiation from organic disease of the heart, however, calls for special training and experience in cardiology (study of the heart and its functions). The diagnostic problem, likewise, involves the recognition of possible associated disease such as pulmonary tuberculosis, exoph-



thalamic goiter or malaria. The electrocardiogram, the roentgenogram (x-ray film) and previous training and experience in cardiology should eliminate most of the earlier errors.

"Undoubtedly the most important phase in the treatment of this condition is prevention. Prophylaxis should properly begin at the time of enlistment and in the training camps. The faulty examinations in the last war are clearly illustrated, as pointed out by Lewis, by the fact that nearly half the patients invalidated for effort syndrome or heart disease developed the symptoms before joining the forces and more than half developed them before their training was complete. 'There is not the slightest doubt,' states Lewis, 'that adequate examination would have eliminated most of these men, would have kept them in useful employment, would have spared them much suffering, would have saved hospital space and large funds of the Ministry of Pensions. Such patients were six or seven months in training, five months in the hospital, and gave in return 2.2 months of full and 1.5 to two months light duty.' Experience in the last war demonstrated that the prognosis (outcome) on the whole was more favorable when treatment was instituted early. Prolonged rest in bed and digitalis had little if any effect on the course of the ailment. A correct psychologic approach to a condition with a pronounced mental aspect is essential to success. The patient, above all, must be reassured that he is not suffering from heart disease. The treatment of infections and of foci of infections is important. The regimen of graded exercises, as developed by Lewis, has been preeminently successful in restoring most of these patients to a more or less normal state. It has been useful, both for sorting patients as to their reaction to exercise and in curing their symptoms. After a short rest in bed this regimen is initiated by short drills outdoors, supplemented by hikes and games. The average stay at the hospital, under this plan, has been shortened from an average of 5.3 months to five or six weeks."

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#### MEDICAL PREPAREDNESS: NEWS ITEMS

##### United States Speeds Training of Medical Officers

Washington, December 16 (AP).—The War Department took steps today to train surgeons and other medical personnel for the expanding army.

It authorized \$584,056 to construct quarters for reserve officers and 750 enlisted men at the Walter Reed General Hospital in Washington.

The reserve officers will pursue special courses in surgery and general medical practice. The enlisted personnel will get technical training as laboratory, x-ray and dental technicians, war masters and ward nurses.—*San Francisco Chronicle*, December 17, 1940.

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#### McNutt Directs Defense Health

##### Administrator's Added Duty to Toughen Up Youths for Emergency

Washington, December 3 (AP).—Paul V. McNutt was brought into the national defense setup today as director of all its health and recreation activities in a move which greatly enlarged the scope of his work as Federal Security Administrator.

He was designated by the Cabinet Council of National Defense, with approval of President Roosevelt, as coordinator of all health, medical, welfare, nutrition, recreation and other related fields of activity affecting national defense.

The assignment was described as a further step toward mobilization of all health resources of the nation in the preparedness program. . . .

A White House announcement said he is authorized to set up advisory committees to assist him, including representatives of other federal agencies, state and local governments, organized private groups, and the public at large.—*Los Angeles Times*, December 4, 1940.

\* \* \*

#### Professional Men Face Plight Under United States Conscription Law

Pity the plight of a young professional man—doctor, dentist, or lawyer—under the Selective Service Act. He has no job protection as have salaried men. When he

enters training he loses his practice, in most cases, and has to start from scratch again.

But the Medical, Dental, and Bar Associations, particularly the latter, are organizing to protect their young members in the best way possible during the draft.

"We plan to have members volunteer to take over a draftee's practice during the year he is called for military training," explained Mr. Nathan. "The Bar as a group has been working on this problem for some time and we are pretty well set to give our younger members a decent break."

The problem of doctors and dentists in regard to the draft is not as acute as that of attorneys, according to members of the medical and dental associations.

"Most doctors are members of the Medical Reserve Corps and a lot of graduating internes are volunteering or are planning to in order to finish their military training before entering practice," said an officer of the Medical Association.

It was pointed out officers of the Medical Reserve, which includes dentists, become first lieutenants when called for regular service.

If graduated medical or dental students are not members of the Medical Reserve and are called for service under the Selective Service Act they would not be in actual training very long.

"A man's medical or dental credentials would win him a commission in fairly short order, so he wouldn't be packing a gun very long," explained Colonel Condon C. McCornack, chief medical officer for the Ninth Corps Area.

Colonel McCornack pointed out that a doctor or dentist who is drafted would naturally apply for a commission and would probably receive one in a comparatively short period.

"More and more members of the Medical Reserve are being called each month," said Colonel McCornack. "And we are glad to have young men in the Medical Corps—we need them."

He explained that dentists are in the same group—Medical Corps—and are being called all the time to take their places in various training camps with the doctors. . . .—*San Francisco News*, November 29, 1940.

\* \* \*

#### The Army's Latest: A "Flight Surgeon"

By Howard Needham

Uncle Sam spares no expense to maintain the sharp proficiency of his new war eaglets now being groomed at Moffett Field for active duty in the Army Air Corps.

From the date of his application for training the neophyte of America's air defense is subjected to innumerable medical examinations, and after every flight he is checked by a "flight surgeon."

The "flight surgeon" is the head of America's new air defense program. He came into being with the new standards of flawless performance which have become routine regulation in this Army's expanded air corps.

#### Costly Equipment

With the advent of the flight surgeon, new and staggering figures began to appear on the budgets of Army flying posts all over the country. Equipment, capable of revealing the innermost workings of pilots' physiological make-up, was installed at an expense of hundreds of thousands of dollars.

Currently building at Moffett Field is a flight surgeon's building, separate and distinct from the post's regular hospital. The new building will be under Flight Surgeon Lieutenant-Colonel Charles R. Glenn. When completed it will have eleven rooms, filled with the most modern equipment necessary for the complete and accurate checking of physical conditions.

"This equipment is not so interesting in itself," said Lieutenant-Colonel Glenn, "but its microscopic powers of examination are well-nigh phenomenal."

Lieutenant-Colonel Glenn said the new instruments of scientific detection were created after an analysis of World War I flyers, both those that were killed in action and those who flew successfully through their war period.

Physical histories showed that a majority of the men who went over enemy lines, never to return, had mild organic disorders which were not recognized as serious in the slow and comparatively mild form of aviation existent in 1914-1918.

"Today's planes fly so much faster at such greater altitudes that these minor disorders have become major handicaps, in the eyes of the Army Medical Corps," Colonel Glenn said.

"During the past twenty-five years, by careful study, air corps requirements have been altered, improved and restricted to meet changing conditions in aviation until we have the physical examination now required for anyone who goes into the air."

### Rigid Examination

"This physical examination is the most rigid that anybody can take. When you have passed this examination, you can pass any physical examination."

Present examinations seek to establish the applicant's reserve strength as well as his normal prowess, Colonel Glenn explained. "The entrance examination is just the beginning, for the flight surgeon continues to reexamine the pilot every six months during his training career."

In addition to the semi-annual check, the pilot is observed by the flight surgeon at least once a day on the flying field. He must remain in as good condition as he was the day of his acceptance into the air corps.

Most important bit of Nature's equipment to a war pilot is his eyes. The flight surgeon breaks down all elements of vision and examines each one separately.

"We test the field of vision to be sure all the areas of the pilot's eye are perceiving equally," Colonel Glenn said. "We test the muscle balance to be sure there is no tendency for an individual to see double. We have found that over long periods of flight, fatigue impairs this muscle balance with disastrous results."

"We also find that by measuring this muscle balance, visual acuity, field of vision and color sense, we have a definite indicator of the normal sight of the individual. A reexamination with different results means fatigue or staleness."

### Ears Also Checked

The flight surgeon likewise makes rigorous checks of the pilot's ear and its accessories. A small outer canal or a small eustachian tube, perhaps caused by childhood abscesses or common ear ailments, may prevent the pilot from adapting himself to various heights.

A pilot with such a condition almost invariably suffers great pain because of unequal pressures on the ear drum. This pain will interfere with the flyer's flight proficiency, thus he is disqualified.

Nose and throat, sinuses, heart, circulatory system, chest and lungs, bone structure and all organs receive the same minute scrutiny. Many men, in perfect health, may not be able to fly because of the after-effects of an old illness which normally would not reveal itself, but would prove a definite handicap when flying at extreme altitudes at 300 miles per hour.

Army pilots must not be below 64 inches in height nor above 74, and their weight cannot exceed 200 pounds.

### War Nerves

#### Doctor Finds Bombing Hasn't Affected British

By Staff Correspondent, North American Newspaper Alliance.

New Haven, Conn., December 18.—Biltzkreig and bombing have failed to affect the nervous systems of the British people, says Dr. John F. Fulton, Yale medical school physiologist, who has returned from a trip of observation in England taken in behalf of medical preparedness in this country. . . .

As a physiologist, Doctor Fulton was asked to make special studies for the War Department on the physiological effects upon the fighter pilots of their high-altitude flying and the terrific dive attack tactics of present air fighting. This is a confidential report, but some general aspects of it Doctor Fulton was able to discuss.

#### One Great Problem Is the Power Dive

One terrific problem, both medical and tactical, is what the sudden "pull-out" from a 400-mile-an-hour dive does to a flyer. The human organism isn't built to stand as violent a wrench as an airplane can take. Blood rushes from the head to the feet and the flyer often "blacks out" into unconsciousness. This may be brief or it may last until his plane drops to crash.

Planes will hold course during a brief interval of the pilot's unconsciousness, but he is utterly exposed to attack in such condition. They have experimented with changing the position of the seat to make the jerk up less violent. They have tried having the pilot lie prone, in diving position. Some flyers try tying a scarf tight about the neck to shake off the flow of blood from the head.

Above 20,000 feet—and much air fighting is done at 25,000 to 35,000 feet—flyers require oxygen. The British have better oxygen and other physiological equipment to maintain their flyers at extreme altitudes than the Germans, Doctor Fulton says. That was a decisive factor in turning the air battles against the Germans in September. The Germans' morale in the air cracked up, he says, in the period when 215 planes were brought down over England in one day, September 16.

#### High Altitude Flight Equipment

His report on high altitude flying effects bears upon a primary problem of American defense training. Doctor

Fulton says, "One thing that made the greatest impression on me in my contact with the British RAF was the importance of adequate physiological equipment for protection of the pilot in high altitude flights."

Since only a few of our military planes have not been built for high altitude flying, our pilots so far have had relatively little experience even in routine flying at high altitudes, let alone fighting. So they have little adequate oxygen equipment.

"A little oxygen equipment and the researches of a handful of English investigators formed probably the chief factor, after their gunnery, in the British air successes. We can profit by their experience, for they have placed it all at our disposal."

One of the new kinds of casualties that particularly interested Doctor Fulton is death or collapse from the blast of a bomb which leaves no sign of physical injury. Relatively many such casualties occur; both death and temporary collapse, especially in confined spaces, as on naval vessels under air attack. He found that not much of anything has yet been discovered about blast cases.—San Francisco Chronicle, December 19.

### Draft Boards List Eligibles

Report Discloses 2,360 Ready for Training; 6,709 Await Tests

Los Angeles County's 107 local draft boards have placed 2,360 young men between the ages of 21 and 35 years at the disposal of the United States Government as future selective service trainees.

Another 6,709 have been certified as ready for immediate duty, provided they pass physical examinations.

That was the report yesterday of Major Elkin J. Plato, Southern California draft coordinator, after a "trial balance" of the first month's questioning of the first 10 per cent of the county's conscription registrants.

#### Total 384,515

His announcement began with the final total of potential military trainees on the 107 boards' rosters: 384,515.

Tentatively, a quota of 16,826 draftees has been assigned to Los Angeles for service before June 1, Major Plato added. Of these, approximately half may expect a call by next March, he said.

Before January 1, it was indicated, these 8,413 men will have been certified as "available" whenever summoned.

#### Get Questionnaires

As of December 6, date when the initial 10 per cent of the registrants were to have been classified, 50,121 had received their eight-page questionnaires on the basis of which each man will be placed in categories denoting his place on the draft waiting list.

Some 36,588 already have been classified, Major Plato's report showed.

Another 13,533 questionnaires are being considered by local draft boards. In some cases, the Coordinator said, boards have been required to investigate deeper into registrants' claims for deferment.

#### Influenza Delays Work

However, Major Plato added that the six county appeal boards, last resort of draftees seeking exemption, have not been "as busy as we expected." Requests for deferment from duty on grounds of the importance to national defense of a man's job come most frequently, he said.

Chief bottleneck in the race to classify registrants for future service has been medical examinations, Major Plato declared.

"The influenza outbreak, which has kept our doctors extremely busy, has set us back two weeks," he said.

#### Digest of Cases

Here is a breakdown of the 36,588 cases already classified in the county:

Class 1-A (medically fit, without dependents or essential occupations, and ready for instant call): 2,360.

Class 1-A (still to be medically examined, but otherwise rated immediately available): 6,709.

Class 1-B (available for "limited duty" only because of slight physical deficiencies): 367.

Class 1-C (already in service as Regular Army, Navy, or Marine Corps members, the Reserve, or National Guard): 616.

Class 1-D (college students deferred until the expiration of the present school year): 440.

#### Limited Duty

Class 1-E (same, but available for "limited duty" only): 20. Class 2-A (deferred because their jobs are deemed essential to national defense): 885.

Class 3-A (deferred for reason of having dependents): 22,137.

Class 4-A (have completed required military service): 329.  
 Class 4-B (government officials deferred by law): 3.  
 Class 4-C (aliens who have not taken out first papers): 1,351.  
 Class 4-D (ministers and divinity students): 144.  
 Class 4-E (conscientious objectors): 86.  
 Class 4-F (unfit for physical, mental or moral reasons): 1,141.—*Los Angeles Times*, December 18, 1940.

#### Hospital Defense

Announcement by the American College of Surgeons of the 1940 approved list of 2,806 hospitals in the United States, Canada, and a few other countries, should be hailed with exceptional interest at a time when national defense looms large in our thinking.

Preservation of life and health has emergency significance today. Thousands of additional workers are being drawn into industry as production of the materials and implements of war is speeded, and these workers must be protected.

In the United States, mobilization of the national guard and conscription present new health problems.

On the front line of defense against the menaces to life and health are our hospitals, which never need wait for a national crisis to be pressed into emergency service, but must always be ready for catastrophe, whether it is a head-on collision of motor-cars or a shrieking tornado that leaves havoc in its wake.

Of the 2,806 hospitals that the American College of Surgeons lists as approved, 200 are approved by the college for graduate training in general surgery and the surgical specialties. These hospitals might be considered key-fortresses in the hospital defense system.

In our military plans for defense, we are profoundly concerned with training pilots and airplane mechanics, soldiers, sailors and marines, and officers to command them.

It is equally important to train surgeons for the protection of the civilian as well as the military forces. Thus the program of the American College of Surgeons to encourage more suitable hospitals to undertake graduate training for surgery is exceedingly opportune.—*San Francisco Call-Bulletin*.

## COMMITTEE ON POSTGRADUATE ACTIVITIES†

### California Clinical Conferences

Programs for clinical conferences, to be held under the auspices of several county medical societies, are now in the making. Tentative programs are being drafted by the local Postgraduate Committees, acting in coöperation with the California Medical Association Committee on Postgraduate Activities:

San Diego County Medical Society, Dr. F. E. Toomey, Chairman.

Fresno County Medical Society, Dr. J. M. Arthur, Chairman.

Imperial County Medical Society, Dr. George C. Holeran, Chairman.

In due time, further information will be sent to the physicians in the respective districts by both the local and state committees.

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### Eye, Ear, Nose, and Throat Course: Los Angeles

The Tenth Annual and Midwinter Clinical Course in Ophthalmology and Otolaryngology will be given by the Research Study Club of Los Angeles, January 20 to January 31, inclusive.

Instruction courses will be given as follows:

#### The Eye

Edward Jackson, M.D.—"Methods of Measuring Refraction."

Meyer Wiener, M.D.—"Surgery of the Globe."

Russell L. Stimson, M.D.—"Clinical Photography of the Eyes."

†Requests concerning clinical conferences, guest speakers, and other information, should be sent to the California Medical Association headquarters office, 450 Sutter, San Francisco, in care of the Association Secretary, who is secretary ex officio of the Committee on Postgraduate Activities.

Walter I. Lillie, M.D.—"Some Practical Points Pertaining to the Routine Examination and Treatment of Patients in the Office."

Roderick P. O'Connor, M.D.—"Technique of the O'Connor Operation."

Ralph I. Lloyd, M.D.—"Perimetric Methods."

#### Ear, Nose, and Throat

John F. Barnhill, M.D., and William J. Mellinger, M.D.—"Points in the Anatomy that Make Surgery of the Neck Comparatively Safe and Easy."

Albert C. Furstenberg, M.D.—"Acute Infections of the Mouth and Pharynx."

Gilbert Roy Owen, M.D.—"Oto-Ophthalmologic Roentgenology."

Isaac H. Jones, M.D.—"Comments on Vitamins; Sense of Smell; and Neuro-otology."

Leland G. Hunnicutt, M.D., Russell M. Decker, M.D., and Herman Semenov, M.D.—"Changes in the nasal mucous membranes resulting from growth, disease, and drugs. Illustrated by colored photomicrographs."

"Histopathological changes in the nasopharynx and eustachian tubes in relation to chronic catarrhal deafness."

"Histopathology of the middle ear and sinuses. Allergy."

The fee for the course is \$50—\$25 payable on registration and \$25 at the beginning of the course. Registration may be made by sending a check to Pierre Violé, M.D., Treasurer, 1930 Wilshire Boulevard, Los Angeles. Any additional information may be secured by writing to the secretary, Don S. Dryer, M.D., 2007 Wilshire Boulevard, Los Angeles.

The Committee of the Research Study Club: Edwin S. Budge, Frank E. Detling, Don S. Dryer, A. Ray Irvine, Simon Jesberg, Harold S. Muckleston, Pierre Violé, Clifford B. Walker, and Isaac H. Jones, Chairman.

### American Laryngological, Rhinological, and Otolological Society: Western Sectional Meeting

Scientific meetings will be held at the Family Club, Bush and Powell Streets, San Francisco, Robert C. Martin, M.D., Chairman, on Saturday and Sunday, February 1 and 2, 1941.

10 A. M. FEBRUARY 1

President's Address—J. Mackenzie Brown, M.D., Los Angeles.

#### Symposium on Therapy of Diseases of the Ear, Nose, and Throat

Vitamin Therapy—W. P. Covell, M.D.

Pharmacology of Vasoconstrictor Drugs—M. L. Taintor, M.D.

Serum Therapy—K. F. Meyer, M.D.

Chemotherapy—Edwin E. Osgood, M.D.

Roentgen Therapy—Harry Garland, M.D.

#### Afternoon

Golf at San Francisco Golf Club. Transportation will be furnished for those who wish to golf or ride about the San Francisco Bay region.

7 p. m.—Banquet, Pacific Union Club.

#### SUNDAY, FEBRUARY 2

8:30 a. m.—Breakfast, Bohemian Club.

9:15 a. m.—Business Meeting.

10:00 a. m.—Scientific Session, Family Club.

Infections of the Masticator Space—Colby Hall, M.D.

Operative Treatment of Carcinoma of the Esophagus—H. Brodie Stephens, M.D.

Post-Traumatic Syndrome of Head Injuries—Howard Brown, M.D.

Brain Abscesses with Recovery—Henry Profant, M.D.

Autonomic Nervous System, the Embryology, Anatomy, and Physiology Thereof—David R. Higbee, M.D.

\* \* \*

### The Will to Learn\*

Three weeks ago the Interstate Postgraduate Medical Association of North America held its five-day annual meeting at Cleveland. The public auditorium, an enormous hall with a seating capacity of thousands, was hired for the purposes of the daily assembly and the housing of the commercial and scientific exhibits. Five thousand physicians were registered. The majority came from the Midwest, but many were from communities as distant as Texas, California, and Canada. They met every morning at eight o'clock, and adjourned at nine or ten o'clock at night, having had an hour's respite for both lunch and dinner. Every paper and presentation was started and stopped on the minute. The program was general and had a wide medical

\* From an editorial in *The New England Journal of Medicine*, November 7, 1940.



appeal. The Association first met in a small church a number of years ago and has steadily grown, until last year at the Chicago meeting the attendance was six thousand. Such an extraordinary demonstration of the will to learn on the part of the medical profession at large may well be regarded as indisputable evidence that the health problems of the western three-quarters of North America are in good hands and that the community at large need have no fear for its well-being. It is perhaps not saying too much to state also that this meeting is evidence of a type of altruistic humanism and humanitarianism that will in the end serve to lead the world out of its present chaotic barbarianism.

Next week New England has her third postgraduate assembly, modeled on the larger organization, but cut down to fit a smaller territory and fewer doctors. Every registered physician in this area has been invited to attend. The appeal is universal rather than specialized, and the conduct of the meeting may be expected to reach the high efficiency of its predecessors. There can be no question of the will to learn on the part of the local profession; therefore, let them compliment the speakers, evidence their faith in the managing committee and profit their own interests by attending in even larger numbers than they have in the past two years.

\* \* \*

**TWO-DAY SYMPOSIUM ON MILITARY MEDICINE AND SURGERY: IN SAN DIEGO ON SATURDAY AND SUNDAY, FEBRUARY 1-2, 1941**

**Special Announcement**

Preliminary announcement is made of a two-day (Saturday-Sunday, February 1 and 2) symposium on military medicine and surgery to be held under the auspices of the San Diego County Medical Society, in coöperation with the California Medical Association Committee on Postgraduate Activities. The San Diego committee consists of Doctors F. E. Toomey, S. J. McClendon, and Frank St. Sure; respectively, editor of San Diego Bulletin, California Medical Association councilor, and president of the San Diego County Medical Society.

Headquarters will be the Hotel Del Coronado, where most of the conferences will be held.

A cordial invitation to attend this two-day conference is extended to all members of the California Medical Association. The schedule has been arranged to make it possible for members of other county societies in the southern section of the state to be present and participate in what promises to be a conference of special interest.

\* \* \*

Excerpts from a letter received from Doctor Toomey follow:

Our committee, composed of myself as chairman, Dr. Frank St. Sure, president of San Diego County Medical Society, and Dr. S. J. McClendon, state councilor of the California Medical Association, met this noon and officially formed the San Diego Civilian Medical Defense Committee.

The symposium on military medicine and surgery will be held at Hotel Del Coronado on Saturday and Sunday, February 1 and 2. We shall have working in conjunction with, and as members of, the above committee, Captain Manchester, United States Navy, Medical Corps (retired), and a member representative of our medical auxiliary. We have at present been assured of the coöperation of our newspapers, the Spreckels Companies, our two radio stations, and the Publicity Committees of the Chamber of Commerce. . . .

Our program will tentatively be headed by Dr. Joel White, who is procuring various slides and cuts from the Defense Department in Washington, D. C. Doctor White is a Captain in the United States Navy and is extremely well qualified in this matter. We are asking you and the State Committee for proposals relative to additional speakers. Doctor McClendon, who is to aid as program chairman, suggests that our symposium begin at approximately 4 p. m.; then a dinner meeting at 7 p. m., or thereabouts—the Auxiliary being invited to attend—and the speaker be one of our retired Admirals who may be extremely versed on our problems. . . .

Special invitations are extended to Doctor Wilson, Doctor Gilman, Doctor Dukes, and Doctor Rogers, and yourself. May we suggest that your office contact these men and explain the proposition and the date of the meeting to them.

\* \* \*

**From a letter from Councilor McClendon:**

I have taken over the full responsibility for the symposium on the program for military medical preparedness February 1 and 2. I have this morning arranged the major part of the program.

Captain William Chambers, Commanding Officer of the Naval Hospital, has consented to act as chairman under me for the arrangement of the entire program. We have tentatively contacted and arranged for eight speakers representing various branches of the military medical service. Definite topics and assignment of hours will be ready in a few days and I shall send you the complete program at my earliest convenience.

\* \* \*

**In a later communication, Chairman Toomey writes:**

The tentative outline of the program of the Committee on Medical Preparedness is herein contained. A definite effort has been made to allocate the work to individuals who are capable of accomplishment. . . .

This committee will meet in early January, and at that time, the members should be able to make a report of their efforts and offer suggestions to the committee as a whole. We should keep in mind that our duty is to prepare for an emergency which would cause a disruption of the usual and normal activities in our community.

\* \* \*

The tentative list of major topics for the two-day conference, with names of subcommittees who will aid in securing representatives from the medical services of the Army, Navy, and Aviation services, is as follows:

1. **SANITATION AND PUBLIC HEALTH:** Dr. Alex M. Lesem.

2. **BLOOD BANK AND DONORS:** Mr. Al Ferm. Development of this department will require considerable effort, but, we believe, that through the coöperation of the veteran organizations, enough volunteers may be procured. The necessity of blood typing and Wassermann checks will require study. The same could be done at the San Diego County Hospital, or by some other publicly supported department.

3. **AMBULANCES AND FIRST AID:** Procurement of proper first aid locations in various districts and direction of same. Development of first aid "unit groups"—each to act with a given area. Dr. Louis Strahlman.

4. **FIRST AID:** Procuring and training of workers. Dr. Paul R. Brust.

5. **HOSPITALS:** Procuring and developing emergency hospital sites; a study of present available hospital facilities; consideration of such areas as Jacumba, Chula Vista, El Cajon, and Escondido. Dr. A. E. Banks, assisted by Dr. F. E. Jacobs.

6. **WOMEN AND CHILDREN:** Health, housing, evacuation, etc. Dr. S. J. McClendon, director; Dr. Frank Robinson, assistant.

7. **COORDINATING OFFICER:** To act as coördinator of ambulance, first aid, emergency hospitalization activities in order that each unit may function in coöperation with the others. Dr. J. D. Manchester, Captain United States Navy, Medical Corps, retired.

8. **EMERGENCY SUPPLIES:** Serum, dressings, medications, instruments, etc. Dr. M. C. Harding.

The above divisions have been made in order to attain the greatest amount of results without too much waste of time. Each departmental director is to have charge of his section, but his final action must have the approval of the Committee as a whole.

Your chairman will be more than glad to receive suggestions.

Thank you for your coöperation.

F. E. TOOMEY, M. D.,

*General Chairman, Committee on Medical Preparedness, National Defense for San Diego County.*

Invitation to attend the conference is extended to every member of the California Medical Association.

As soon as the final arrangements and program are completed, the California Medical Association Committee on Postgraduate Activities will send a letter with complete information to each member of every county medical society in the southern section of the state.

The conferences will be held on Saturday and Sunday, February 1 and 2, beginning at 4 p. m. on Saturday, thus making it possible for colleagues in Los Angeles and other southern counties to arrive at the Hotel Del Coronado in ample time, without interfering with Saturday morning duties in their respective communities.

A letter from Chairman Francis E. Toomey gives a summary of the plans thus far made:

(COPY)

F. E. TOOMEY, M. D.  
555 Date Street

San Diego, Calif., December 26, 1940.

Dear Doctor Kress:

I am enclosing for you, the outline of the proposed activities of our Committee on Medical Preparedness. We feel that we are going to get some results here.

Doctor McClelland has been arranging the program for the 1st and 2nd as formerly explained to you. We are trying to divide the work between us in the hopes that we may be able to accomplish a greater amount in a shorter period of time. I have asked him to forward the list of speakers to you at the earliest moment.

The meetings are to be held at Hotel del Coronado beginning at 4 p. m. on the 1st; additional dinner meeting in the evening, and another meeting on the morning of February 2.

Members who wish to attend and desire hotel accommodations, should make reservations as early as possible. If, however, they do not wish to stay at Hotel del Coronado, there should be plenty of room at El Cortez, U. S. Grant, or any of the other hotels within the City of San Diego.

I have invited Governor Culbert L. Olson to appear at the dinner. . . .

Thank you for your attention to the matter in relation to the invitations to the State Association officers. We hope that they will see fit to attend.

Sincerely,

F. E. TOOMEY, M. D.

#### ADDITIONAL INFORMATION CONCERNING TWO-DAY SYMPOSIUM ON MILITARY MEDICINE AT SAN DIEGO

This program is being sponsored under the active chairmanship of Captain Chambers, Commanding Officer, U. S. Naval Hospital, who will be aided and supported by Captain John Manchester, U. S. N. (M. C.) Retired; Rear Admiral Blakely, Commandant of the Eleventh Naval District; and Major General Upshur, Commandant of Marine Base.

#### TENTATIVE LIST OF SPEAKERS

*Status of Medical Preparedness in California*, by Philip K. Gilman, M. D., San Francisco, Chairman of Council of California Medical Association and Chairman of California Committee on Medical Preparedness.

*Greetings from the State Medical Association*, by Harry H. Wilson, M. D., President of the California Medical Association.

*Selective Service Plans in California*, by Lieutenant-Colonel Bert S. Thomas, Chief of the Medical Division, Adjutant General's Department, State of California.

*Combined Operations of Naval Medical Department Units with Land and Sea Forces*, by Captain William L. Mann, Jr., (M. C.), U. S. M., Post Surgeon, Marine Corps Base. (Motion picture.) Colored film.

*The Medical Side of Naval Recruit Training*, by Captain Griffith E. Thomas, (M. C.), U. S. N., Senior Medical Officer, Naval Training Station.

*Surgery in Modern Warfare*, by Captain Frederic L. Conklin, (M. C.), U. S. N., Chief of Surgical Service, Naval Hospital.

*The Training of Hospital Corpsmen in the Navy*, by Commander Louis H. Roddis, (M. C.), U. S. N., Officer in Charge of Hospital Corps School.

*Some Aspects of Aviation Medicine*, by Commander Joel J. White, (M. C.), U. S. N., Chief of Medical Service, Naval Hospital.

*The Dental Side of Naval Recruit Training*, by Commander Eugene L. Walter, (D. C.), U. S. N., Dental Office, Naval Training Station.

*Venerereal Diseases and National Defense*, by Lieutenant Commander John F. Luten, (M. C.), U. S. N., Chief of Urological Service, Naval Hospital.

\* \* \*

#### Five-Day Conference at San Jose

On January 6, 7, 8, 9, and 10, the San Jose Hospital Association featured Cyrus L. Sturgis, M. D., Professor of Internal Medicine at the University of Michigan, as this year's guest speaker. Evening meetings were held daily in the San Jose Medico-Dental Building Auditorium.

The program follows:

MONDAY EVENING, JANUARY 6, 8 P. M.

*The Nature and Treatment of Hypertension*

Observations based on twenty-three years' experience

TUESDAY EVENING, JANUARY 7, 8 P. M.

*The Hemorrhagic Diseases*

WEDNESDAY EVENING, JANUARY 8

Banquet, 7 P. M.

Silver Room, Hotel Sainte Claire

Ladies Invited

*The Menace and Treatment of Obesity*

THURSDAY EVENING, JANUARY 9, 8 P. M.

*The Macrocytic Anemias and the Anemias of Pregnancy*

FRIDAY EVENING, JANUARY 10, 8 P. M.

*The Therapeutic Value of Blood Transfusions, Preserved Blood and Blood Substitutes*

Guest speakers of previous years were:

1926—William Carpenter McCarty, M. D., Rochester, Minnesota.

1927—James B. Herrick, M. D., Chicago, Illinois.

1929—Edwin H. Place, M. D., Boston, Massachusetts.

1930—Alfred W. Adson, M. D., Rochester, Minnesota.

1931—Clay Ray Murray, M. D., New York City, New York.

1937—Walter Schiller, M. D., Frauen Klinik, Vienna.

## COMMITTEE ON PUBLIC HEALTH EDUCATION†

Judging of both the essay contest for high school and junior college students and the motion picture scenario contest, open to anyone in California, sponsored by the Committee on Public Health Education, was started during the past month. The decisions of the judges will be announced when received, through newspaper stories as

† The Committee on Public Health Education was established through Substitute Resolution No. 6 at the Del Monte annual session, May 3, 1939.

The Committee on Public Health Education consists of Frank R. Makinson, chairman, Oakland; Philip K. Gilman, secretary, San Francisco; Samuel Ayres, Jr., Los Angeles; Thomas A. Card, Riverside; Lowell S. Gohn, Los Angeles; Junius B. Harris, Sacramento; George H. Rohrbacher, Stockton; Harry H. Wilson (ex officio), Los Angeles. Mr. Ross Marshall is the Public Relations Counsel of the Committee, and may be addressed at 408 South Spring Street, Los Angeles (telephone MUTual 6002), or 244 Kearny Street, San Francisco (telephone YUKon 2212).

well as in the next issue of CALIFORNIA AND WESTERN MEDICINE.

The Committee on Public Health Education approved a resolution that the winner of the essay contest be awarded a trip to the Del Monte convention and be introduced to the delegates on the opening day of the convention.

Distribution of medical literature through pamphlets obtained from the American Medical Association, to students at Claremont, Pomona, and Scripps colleges was found to have been a successful experiment. Based on observation by the college physician during the latter two months of the previous school year and the first two months of this school year, it was found that enough students obtained various pamphlets and read them to justify the moderate cost of supplying the pamphlets. At the same time the experiment indicated which types of pamphlets were most popular with the students as a guide to future activities.

Dr. Samuel Ayres, Jr., was added to the subcommittee in charge of this work, the other members being Doctors Thomas Card of Riverside, Gilbert Coltrin of Claremont College, and Ross Marshall, the Public Relations counsel. Plans are under way to furnish the pamphlets found to be most in demand to other selected college student bodies in California. These pamphlets not only explain the relationship of the doctor of medicine to the life of the college student, but also expose quacks and the fallacies advanced by the so-called exponents of other branches of the healing arts.

During the month an additional fifteen-minute talk on the sulfonamide family was compiled by the Public Relations Counsel and copies were sent to each of the county medical societies' speaking bureaus. Considerable progress was made in the project to have radio stations in California broadcast medical talks supplied by the American Medical Association. The Public Relations Counsel, as part of his work for the California Medical Association, undertook the publicity for the Los Angeles County Medical Society Medical-Dental Exposition to be held at the Shrine Auditorium in Los Angeles during the week of February 2-9, inclusive.

—R. M.

## C. M. A. DEPARTMENT OF PUBLIC RELATIONS†

Further progress was made in work on the Basic Science Initiative last month through several informal meetings and considerable correspondence. The measure has now reached a point where a proposed "fifth draft" appears about ready to be reproduced and submitted to the Committee on Public Relations.

At this writing the new proposed draft of the initiative is being studied by members of the Committee on Public Relations and by representatives of the dental profession. A few minor changes in wording have been proposed, and the next major step is the securing of approval of the revised draft by the dentists. With this approval, the Committee on Public Relations will be in position to put its final approval on the measure and to present it in its new form to the California Medical Association Executive Committee for official adoption.

—J. H.

† The complete roster of the Committee on Public Relations is printed on page 2 of the front advertising section of each issue. Dr. Donald Cass of Los Angeles is the chairman, and Mr. John Hunton is the secretary. Component county societies and California Medical Association members are invited to present their problems to the committee. All communications should be sent to the director of the department, Mr. John Hunton, Room 2004, Four Fifty Sutter Street, San Francisco.

## CALIFORNIA PHYSICIANS SERVICE†

### Membership

September, 1939 .....	1,220
March, 1940 .....	9,322
September, 1940 .....	17,398
December 29, 1940 .....	20,894

### New Groups Enrolled.

Among groups recently enrolled are the following: Acme Fast Freight, Los Angeles; Arco Company of California, Los Angeles; Automobile Club of Southern California, Ventura; Barbara Oil Company, Santa Barbara; Bellevue Hotel Beauty Salon and News Stand, San Francisco; Borton, Petrini, Conron & Borton, Bakersfield; Butler's Chiropody Supply Company, San Francisco; California Tire Company, Santa Barbara; Central Bank, Oakland; Cooper's Inc., Fresno; Coryell's, Santa Barbara; The Credit Bureau of Santa Barbara; Edison School, Oakland; Emerson Junior High School, Los Angeles; Federal Housing Administration, San Francisco; E. Gottschalk & Company, Fresno; Gunn, Carle & Company, San Francisco; Habenicht & Howlett, San Francisco; Flo Haley's Beauty Salon, Los Angeles; Miss Harker's School, Palo Alto; Hill Bros. and Retzer Van and Storage Company, Los Angeles; Henry J. Kaiser Company, Oakland; Lilli Ann Dress Company, San Francisco; Los Feliz Elementary School, Los Angeles; George W. Metlar Company, San Francisco; Morton Salt Company, San Francisco; Neighborhood House, Santa Barbara; Employees of New York Central System, San Francisco; Pacific Metals Company and Pacific Foundry Company, San Francisco; Planters Nut and Chocolate Company, San Francisco; Polytechnic Elementary School, Pasadena; Presidio Open-Air School, San Francisco; Drs. Preston, Betts & Weiss, Visalia; Price, Waterhouse & Company, San Francisco; Roderbeck's Shoes, Santa Barbara; Roos Bros., Fresno and Palo Alto; St. Paul Dye works, Santa Barbara; Santa Barbara County Assessors' Office, Santa Barbara; Sherwin Williams Paint Company, Emeryville; Sonoma County Teachers' Association, Kenwood; City of South Pasadena; Sterling Drug Company, Santa Barbara; Taft Union High School District; Westridge School for Girls, Pasadena; Widney High School, Los Angeles; and Wilhoit's Luggage Shop, Santa Barbara.

### Financial.

A review of statistics covering services rendered during the month of September presents the following information.

During September, when there were 17,398 dues-paying beneficiary members throughout the state, 1,401 professional members treated 2,926 cases. The sum of \$19,849.05 was paid to professional members covering 14,703 units of service rendered, at a unit value of \$1.35. The average check per doctor was \$14.17; the average number of units of service rendered per doctor was 10.5. Among the 5,100 professional members in the state, 27.5 per cent participated during September.

### Influenza Epidemic.

The volume of cases being treated during the months of November and December has been directly attributable

† Address: California Physicians' Service, 333 Pine Street, San Francisco. Telephone EXbrook 3211. Alison Kilgore, M. D., Secretary.

Copy for the California Physicians' Service department in the OFFICIAL JOURNAL is submitted by that organization.

For roster of nonprofit hospitalization associates in California, see in front advertising section on page 3, bottom left-hand column.



to the prevalence of influenza. We have found that from two to three times as many members have received medical care during that two-month period, and indications from our records would confirm the general impression that influenza illnesses have assumed epidemic proportions. Our reports from doctors have frequently shown a condition of fever with leukopenia, indicating that we have been dealing with true influenza. The observations drawn here are, of course, merely surmises from the general run of work in the medical department. Statistics covering this situation will be available at the time bills for the two months are paid.

#### *Board of Trustees—Meetings.*

Inaugurating on a trial basis a new plan for holding meetings of the Board of Trustees of California Physicians' Service, the Board will meet on January 5 in Fresno. Invitations have been sent to presidents and secretaries of county medical societies in the area, as well as to administrative members of the California Physicians' Service and deputy medical directors, to attend. It is hoped that by holding meetings at some of the points outside Los Angeles and San Francisco two purposes can be served. The Board may have the opportunity to discuss with a greater number of persons ideas concerning California Physicians' Service, and it will be possible to increase the number who will gain some first-hand information about the plan from the central office group.

## COMMITTEE ON INDUSTRIAL PRACTICE

Since the publication in the December issue of CALIFORNIA AND WESTERN MEDICINE (see pages 273-276) of the rule adopted by the Industrial Accident Commission of California on October 16, 1940, and the correspondence relating thereto, a letter dated December 9, 1940, has been received by Council Chairman Philip K. Gilman and signed by W. F. Beem, Chief of the Compensation Bureau of the Industrial Accident Commission:

(COPY)

STATE OF CALIFORNIA  
DEPARTMENT OF INDUSTRIAL RELATIONS  
INDUSTRIAL ACCIDENT COMMISSION  
STATE BUILDING

San Francisco, December 9, 1940.

Philip K. Gilman, M. D.  
California Medical Association  
Four Fifty Sutter Street  
San Francisco, California

Re: Resolution of October 16, 1940, Affecting Medical Reports.

Dear Doctor Gilman:

We have received so many letters with reference to the Commission's resolution of October 16 that there has been some delay in answering your communication of November 19.

As the Commission did not render a written opinion with its rule, it is somewhat hazardous for a member of the staff to give detailed reasons why certain phases of the rule were worded as they were.

Without stating it to be a fact, I would suggest that various attorneys, in discussing this very problem, had intimated that if the Commission made any endeavor to secure medical reports in advance of the hearing that they would get around it by having the doctors keep the reports in their files without retaining them with the insurance company's records. It at least would seem reasonable that the Commission had no intention of bothering an individual doctor where he had sent his report to the insurance carrier and was not participating in some scheme as suggested above.

The hospital situation is a little bit more complex, but it was deemed reasonable and entirely ethical for the employee to have access to the hospital records involving his

own claim, particularly where it is common practice for the defendant's representative to have *entre*. One of the strange phenomena with reference to this whole subject matter is the number of individuals who will make the contention that this rule has a tendency to break down the confidential relationship between the patient and the physician when, as a matter of fact, all we are trying to do is give the employee access to information that normally would be obtainable by a patient were it not a compensation case.

The Commission has considered the suggestions of many individuals and groups requesting that the rule be modified and so far, the Commission has not indicated that they wish to make any modification of the rule other than the one heretofore announced to the effect that it would not apply to nonlitigated cases.

Viewing the situation from the Commission's position, the insurance carrier can think of so many reasons why the rule would not be complied with unless there is a definite delineation there would be no compliance whatsoever.

Very truly yours,

(Signed) W. F. BEEM,  
Chief, Compensation Bureau.

## COMMITTEE ON HISTORY†

### Yuba-Sutter-Colusa County Medical Society An Historical Sketch

While to many people the medical society of Yuba, Sutter, and Colusa counties is a comparatively new association, it is, in fact, one of the oldest societies in the state, an organization of fifty-five years' standing.

Minutes show that the Society was organized on June 2, 1885, with the objectives of cultivation and advancement of the science of medicine. The first regular meeting of the Society saw the election of Dr. C. E. Stone of Marysville as president; Doctor Magill of Nicolaus, vice-president; and Dr. David Powell of Marysville, secretary-treasurer.

The Constitution and By-Laws were adopted and signed on June 15, 1885, by Doctors C. E. Stone, A. Hamlin, Thomas Dobbins, A. E. Kosby, C. E. Ourend, David Powell, and J. Brown of Marysville, E. J. R. De Turberville of Brownsville and J. Melton of Wheatland.

The next meeting of the Association was held two years later in the Yuba County Courthouse. It was the custom in those early days for local doctors to prepare and read papers before the medical group, many of them of interest to the public. The story of many local physicians is recorded, too, in Society annals, which show that Dr. G. W. Stratton was elected to membership on May 14, 1889, he coming from Wheatland, where he had been practicing.

All meetings were held in the courthouse until November 10, 1891, when the Society convened in the offices of Dr. C. E. and Dr. E. E. Stone.

Dr. G. W. Stratton, vice-president, presided at a meeting on May 10, 1892, when a motion was passed to the effect that druggists of the community should not refill physicians' prescriptions without authorization.

The late Dr. J. H. Barr was elected to membership in the Society on February 13, 1894. At a meeting exactly a year later, Doctor Barr spoke of the customs of the Sioux and other Indian tribes in regard to cases of confinement, the doctor having had experience with Indians in his early manhood.

The turn of the century brought several new physicians to the community and on October 2, 1902, the Society voted to affiliate with the State Medical Society.

At a meeting of November 13, 1905, a communication from the State Medical Society was read, stating there was no local society in Colusa County and suggesting that physicians of that county be invited to join the Yuba and

† The Committee on History of the California Medical Association suggests to other component county units the desirability of compiling historical sketches.

Sutter County Medical Society. This was a long time ago, but only last May, 1940, Colusa County joined Yuba and Sutter counties to form the present Yuba-Sutter-Colusa County Medical Society.

Dr. David Powell and Dr. T. P. Perry on April 20, 1906, reported on a state medical society meeting in San Francisco, saying it was very short on account of an earthquake which occurred while the Society was in session.

At the November 10, 1914, session a fund was started "for the relief of physicians of Belgium, and all members present subscribed."

When the Society met on August 12, 1915, it adopted a resolution in favor of bonds for sanitary improvement by extending sewers from their outlet into Ellis Lake, to beyond Fourteenth Street, and "further, that the present situation is unsightly, unsanitary, and a menace to the health of the city of Marysville." Ellis Lake today is a recreation spot.

There is no record of a meeting from October 24, 1916 to April 12, 1920, due to the war.

The minutes of February 7, 1928, show that the Society moved that a letter be sent to the Marysville mayor and council, suggesting "a medical officer be appointed instead of a veterinarian" as city health officer.

The first record of the Medical Society meeting in Hotel Marysville, now the present meeting place, is April 10, 1928.

Nine physicians pledged \$500 each for stock in a corporation to build a new hospital in Marysville, records of the November 13, 1928, meeting show.

At the meeting of July 2, 1935, a plan was instituted whereby a full-time resident physician would be on duty at the Yuba County Hospital and members of the Medical Society would act as an attending staff.

An important step for public health was taken in December, 1937, when the Society voted for pasteurization of all milk and cream sold in Marysville.

The biggest of recent accomplishments is the sponsoring of a bicultures health unit for Yuba and Sutter counties.

In 1940, by authorization of the House of Delegates of the California Medical Association, Colusa County became identified with the Yuba-Sutter County Medical Society, thus constituting a tri-county component unit of the State Medical Association.

## COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION†

### Los Angeles Health Defense Exposition

Commencing on Sunday, February 2, 1941, and continuing through Sunday, February 9, 1941, in the Shrine Civic Auditorium ballroom in Los Angeles, will be presented the "Los Angeles Health Defense Exposition," sponsored by the Los Angeles County Medical Association. On the letterhead of the Los Angeles Health Defense Exposition is given the list of officers and committeemen under whom this somewhat massive attempt at public health education will be presented.

The Director of the Los Angeles Health Defense Exposition is Mr. G. L. Bowe, who had important responsibilities in the Science Building of the Golden Gate

International Exposition. From Mr. Bowe has been received the statement which appears below:

Building a picture of health. That is the story which the Los Angeles County Medical Association will unfold to the public with the Health Defense Exposition. A picture so graphic in its portrayal, so scientific in its theme and so understandable to the laity, that they will know the truth about medicine and what it can do for them. The motion pictures of intricate surgery will create wonderment over the surgeon's skill, confidence in his ability and acceptance of the necessity of an adequate fee. The authentic story of diet and nutrition will dispel the idea that diet fads do anything but harm. The picture "When Bobby Goes to School" will place mother in a position to cooperate with the pediatrician. While the normal birth movie will take, from the layman's mind, the mystery and wrong conceptions of birth, as well be shown the need for a competent obstetrician.

The fears of an ailing heart will be calmed by a complete explanation of its various diseases and methods of correcting some of them, through surgery and other types of therapy.

From the public's knowledge, the little understood afflictions of the brain will be covered with understandable exhibits on brain surgery, using both pathological specimens and motion pictures of surgery. The Radiology Section have a most dramatic exhibit under way. It will occupy some 400 square feet and the many phases of x-ray therapy and x-ray diagnosis will be shown. Motion pictures will also be used.

That the false claims and erroneous appeals of the antivivisectionists may no longer fall upon fertile minds, the story of the manufacture of biologicals will be told by one of the large biological houses. Thus the horse, the calf and other animals will take their place in the Exposition, so that the layman may understand that in the production of life-saving sera, the animals used receive greater care than as beasts of burden, suppliers of food, or as stray robbers of garbage cans or the hungry, forgotten children's pets.

The human eye will come in for its own in a tremendous exhibit of over 1,200 square feet. Its pathology, therapy and the diagnostic instruments will carry this important message. Imagine the awe of the laymen at seeing what the ophthalmoscope records—or the surprises that may await them when they make their own visual acuity test.

The intricacies of the ear, nose and throat will not be left out of this picture of health. Foreign bodies removed from the throat, the sinuses, the inner ear, the vocal cords and other phases of this specialty will be shown.

Urology, tuberculosis, venereal diseases, home care of the sick, internal medicine will all come in with dramatic exhibits, showing their importance in this great scheme of building a picture of health.

Pathology and bacteriology also will tell their story which will include microscopic slides of living spirochetes, blood transfusions and the nonparent test and the frozen specimen technique.

The schools will have their part in this program. Indications are, now, that they may close on Monday, February 3, so that every school child may have an opportunity to see the exhibits.

On Saturday night, February 1, 1941, from 8 to 10 p. m., there will be a preview for just the doctors and their guests. The public will not be permitted until the following day. Here, then, is an opportunity for the profession to inspect their own show and see, unhampered by the public, the program which it has developed and set forth for lay assimilation.

The exhibit of the Cancer Commission, displayed at the Golden Gate International Exposition, will also have a place in the Exposition.

Members of the Los Angeles County Medical Association will also be interested in learning that a formal preview of the Exposition will be held from 8 to 10 p. m., Saturday, February 1. Only the holders of patrons' season's passes and their guests may attend. These patron's passes may be secured at the County Medical Association offices for \$1 and include admittance to the Exposition every afternoon and evening, from February 2 to 9, inclusive, and including the preview on February 1. City, State and county officials will be included by invitation only. The doors will not be open to the general public until 1 p. m., Sunday, February 2. The presidents of the County Medical and County Dental Associations will deliver short addresses of welcome.

The Los Angeles Health Defense Exposition will provide an opportunity for the medical and dental professions to inspect, unhindered by the general public, the exhibits for

† The article concerning the Los Angeles Health Defense Exposition is placed under the major caption of one of the standing committees of the California Medical Association: Committee on Health and Public Instruction. The exhibits presented in the Los Angeles Health Defense Exposition belong to the activities that come under the jurisdiction of the California Medical Association Committee on Health and Public Instruction.

which they are the sponsors. Holders of patrons' season passes may apply at the office of the County Medical Association for private invitation tickets.

\* \* \*

### Problems of the Hard of Hearing

The Eye, Ear, Nose, and Throat Section of the California Medical Association has appointed a Section committee to report on problems of the hard of hearing. Personnel of the Section committee follows: Ray M. Moose, director; Harold D. Smith, secretary. District chairmen: J. Roy Jones, Charles A. Broadus, Doretha Lee, Harold A. Fletcher, George W. Walker, William H. Johnston, Isaac H. Jones, Paul Southgate, Frank A. Burton, Carl M. Hadley. Honorary: Francis L. Rogers and George E. Coleman.

The Director has submitted the following report:

#### PROBLEMS OF THE HARD OF HEARING

1. *What Are the Problems Confronting the Committee?* There are 16,000,000 hard of hearing people in the United States, 3,000,000 of these being school children. In California 5.3 per cent of the school children are significantly handicapped.

2. *Deafness Is Expensive.* A breadwinner who loses his job because of deafness, unless rehabilitated, may drop himself and family onto the shoulders of the taxpayers. The cost per year of educating a deaf child is estimated to be \$264; the cost of educating a normal child is \$100 per year.

3. *Legislation.* Hearing tests are not compulsory in California, consequently most schools test the hearing in only one or two grades each year. In many schools no hearing tests are made at all.

4. *Finding, Treating and Following-Up the Hard of Hearing Child.* These problems involve hearing tests in the school, sending child to doctor, recording results of treatment. A high percent of deafness in adults could have been prevented in childhood. A uniform system of final reports is needed for statistical purposes.

5. *Dietary Problems.* The total calories in the diet of the average American according to Cowgill of Yale may be roughly divided into two halves: one half contains the natural vitamins, the other half is made up of those foods from which the vitamins and iron have been largely if not entirely removed in the "refining" processes. Such foods are cane sugar and white flour and the innumerable products made from them. The committee feels that a wiser choice of foods would benefit all the organs of a man's body including his ears; that there may be increased resistance to infections including infections that impair the hearing. In this light we are sponsoring a program for public education in nutrition.

6. *Coöperation with the Pacific Zone of the American Society for the Hard of Hearing.* The Committee for Hard of Hearing Children of the Pacific Southwest Area Y. M. C. A., and numerous State and local agencies dealing with these problems is in progress. An idea of this work may be gained from the following announcement concerning a meeting held in the Mission Inn, Riverside, on January 3-4, 1941, and presented under the name, "Social Service Workshop for the Hard of Hearing." Papers and discussions on pertinent subjects were presented by a group of professional and lay workers.

## COUNTY SOCIETIES†

### CHANGES IN MEMBERSHIP

#### New Members (18)

##### Kern County (3)

Robert J. Douds, *Bakersfield*  
Robert E. Scherb, *Bakersfield*  
James G. Ware, *Bakersfield*

##### Napa County (2)

Robert H. Bossert, *Burbank*  
C. Ernest Parrish, *St. Helena*

†For roster of officers of component county medical societies, see page 4 in front advertising section.

#### Sacramento County (2)

James Klinefelter, *Sacramento*  
Eleanor B. Rodgeron, *Sacramento*

#### San Francisco County (9)

Giacomo Ancona, *San Francisco*  
Osmund George Bates, *San Francisco*  
Chester A. Blank, *San Francisco*  
Edwin B. Boldery, *San Francisco*  
Agnes G. Plate, *San Francisco*  
Saxton T. Pope, Jr., *San Francisco*  
Erich Pressburger, *San Francisco*  
Hugh Rose, Jr., *San Francisco*  
Harold F. Unsinger, *San Francisco*

#### Shasta County (2)

Julius M. Kehoe, *Redding*  
Clarence H. Schilt, *Project City*

#### Transfers (4)

J. Hallam Cope, from Merced County to Alameda County.

John B. McConnell, from Butte-Glenn County to Shasta County.

John C. Siemens, from Sonoma County to Monterey County.

Ruth Tangier Smith, from Santa Clara County to San Mateo County.

#### Resigned (6)

Jacques P. Gray, from Alameda County.

E. J. Jackemy, from Alameda County.

Julius Lewis, from Alameda County.

Robert Lewis, from Alameda County.

Ann Martin, from Alameda County.

H. G. Mello, from Alameda County.

## In Memoriam

**Juenemann, George Frederick.** Died at Los Angeles, December 10, 1940, age 65. Graduate of George Washington University School of Medicine, Washington, D. C., 1897. Licensed in California in 1923. Doctor Juenemann was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

†

**Leimbach, John Herbert.** Died in San Francisco, December 1, 1940, age 63. Graduate of the University of California Medical School, San Francisco, 1902. Licensed in California in 1902. Doctor Leimbach was a member of the Sacramento County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

†

**Nicholson, Joseph.** Died in Los Angeles. Graduate of the University of Minnesota Medical School, Minneapolis, 1903. Licensed in California in 1925. Doctor Nicholson was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

†

**Ryan, Fred Short.** Died at San Jose, December 1, 1940, age 58. Graduate of Northwestern University Medical School, Chicago, 1908. Licensed in California in 1910. Doctor Ryan was a member of the Santa Clara County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.



**Tillman, Tilton Edwin.** Died at San Francisco, December 5, 1940, age 58. Graduate of Cooper Medical College, San Francisco, 1902. Licensed in California in 1902. Doctor Tillman was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

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#### OBITUARIES

**Fred S. Ryan**  
1882-1940

Dr. Fred S. Ryan, a past president and present councilor of the Santa Clara County Medical Society, died on December 1, 1940, of coronary occlusion, at the age of 58. Recently appointed to the superintendency of the Santa Clara County Hospital, he was taken on the threshold of greater opportunities to serve his community.

For several years, Fred Ryan knew the hazard that he faced, but he let no fear of what might come affect him nor prevent him from always putting what he believed to be his duty ahead of any consideration for himself. He was always a cheerful, helpful friend, who thought first of others and last of himself. He had known bitter reverses and crushing disappointment, but, like good steel in the tempering, he emerged strengthened by his travail. We knew Fred Ryan as a wise and gentle man and a loyal and understanding friend. He was a brilliant surgeon and, more than that, a true physician, whose name was blessed by his patients and honored by his colleagues.

Fred S. Ryan was born on October 1, 1882, in a small North Dakota town. His B.S. degree was conferred by the University of California in 1903, and his M.D. degree by Northwestern University in 1908. He interned for two years at the Cook County Hospital in Chicago and, in 1911, began practice in San Jose. Doctor Ryan served during the World War as a lieutenant in the medical department of the Army, returning to his practice in San Jose in 1919. He had been a member of the Santa Clara County Medical Society, the California Medical Association, and the American Medical Association since 1911; he was a Fellow of the American College of Surgeons and a member of Phi Beta Pi medical fraternity.

Fred Ryan lived a full life and a good life; his name will be written with those who have served their fellows well.

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**George F. Juenemann**  
1875-1940

He was born in Baltimore, Maryland, in 1875, and was graduated from the George Washington University Medical School in 1897. He entered the Army as a contract surgeon in 1898, serving until 1903. He was graduated from the Army Medical School in 1904, when he entered the regular service and served in Mexico under General Pershing.

He made several tours to the Philippine Islands. He knew the Philippine Islands in the early days of American occupancy as very few people learned about them—by actual experience. He commanded the General Hospital at Fort Logan H. Roots and Fort De Moines during the war and was later in charge of the Sternberg General Hospital in Manila. His last Army station was at Fort William, Maine.

He was retired for physical disability in 1922, with rank of colonel, and came to Los Angeles the following year.

Doctor Juenemann possessed fine ability as a diagnostician and was meticulous in the art of therapy. He had a humor which was at all times precious. He was able to bring smiles and cheerfulness to hosts of patients who could

see only the darker side of life. He never failed to be honest with an absent adversary with whom he might be in disagreement.

He was loyal to his work, his friends, and his country to the highest degree. Thousands mourn his loss and extend sincerest sympathy to his widow, son, and daughter.

—J. V. B.

## THE WOMAN'S AUXILIARY TO THE CALIFORNIA MEDICAL ASSOCIATION†

MRS. A. E. ANDERSON.....President  
MRS. WILLIAM C. BOECK.....Chairman on Publicity  
MRS. KARL O. VON HAGEN.....Asst. Chairman on Publicity

Alameda County honored thirty-five new members at the November meeting. Dr. A. D. Davis, guest speaker, discussed *Plastic Surgery*. Mrs. Stanley Truman, Public Health Chairman of the Auxiliary, has completed plans to present speakers on two of a series of radio programs to be sponsored by the Twenty-Eighth District of the California Congress of Parents and Teachers. Approximately \$200 has been added to the Loan Fund for senior medical students as a result of the fashion show and bridge luncheon which was held in October.

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Intimate, everyday experiences of a journalist's wife in southern European countries before they were involved in war were related by Mrs. Hugo Templeton Speck of San Francisco to a large audience attending the tea given by the Humboldt County Auxiliary on December 3.

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Dr. Willsie Martin, Rector of the Wilshire Crest Presbyterian Church, recommended the revival of the old American custom of the spirit of neighborliness for the sake of democracy, at the November meeting of the Los Angeles group. Dr. Elizabeth Mason Hohl, President of the Los Angeles Physicians' Aid Association, was present to receive a check for \$476.98, proceeds from the election night party given by the Auxiliary in behalf of the Physicians' Aid. December marks the eleventh anniversary of the founding of the Los Angeles Auxiliary. In celebration, Past President Mrs. E. Eric Larson opened her magnificent Fremont Place home to the entire group for a Christmas tea on December 10.

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Approximately fifty members of the Santa Clara Auxiliary brought gifts and food for Christmas baskets for the needy to the home of Mrs. George Barry on December 2. A substantial donation was made to assist the Junior Auxiliary to the Ladies of Charity in purchasing a resuscitator for the O'Connor Sanitarium in San Jose.

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Mr. Sam Lee spoke to a group of fifty-five members in San Francisco on *Chinese Life and Culture in the West*. Mr. Lee is president of the Chinese Historical Society and gave a scholarly presentation of a subject which dealt with the contributions of his people to the new world, particularly emphasizing the Chinese life and people in California.

†As county Auxiliaries of the Woman's Auxiliary to the California Medical Association are formed, the names of their officers should be forwarded to Mrs. Karl O. Von Hagen, Assistant Chairman on Publicity, 2435 Nottingham Avenue, Los Angeles. Address of the Chairman on Publicity: Mrs. William C. Boeck, 712 North Maple Drive, Beverly Hills.

For roster of officers of state and county auxiliaries, see advertising page 6.

## MISCELLANY

Under this department are ordinarily grouped: News Items; Letters; Special Articles; Twenty-Five Years Ago column; California Board of Medical Examiners; and other columns as occasion may warrant. Items for the News column must be furnished by the fifteenth of the preceding month. For Book Reviews, see index on the front cover, under Miscellany.

## NEWS

### Coming Meetings.†

California Medical Association, Hotel Del Monte, Del Monte, California, May 5-8, 1941.

American Medical Association, Cleveland, Ohio, June 2-6, 1941.

American College of Physicians, Statler Hotel, Boston, April 21-25, 1941.

### Medical Broadcasts.\*

American Medical Association Series of Radio Programs: Every Wednesday, 7:30 p. m., Pacific Time, Over Blue Network.—*Doctors at Work* is the title of the sixth annual series of dramatized radio programs to be presented by the American Medical Association and the National Broadcasting Company.

The series will open on Wednesday, November 13, 1940, and run for thirty consecutive weeks, closing with a broadcast from the American Medical Association meeting at Cleveland on June 3, 1941. The program is scheduled for 10:30 p. m., Eastern standard time (9:30, Central; 8:30, Mountain; 7:30, Pacific time) over the Blue Network, other NBC stations, and Canadian stations.

The programs will dramatize what modern medicine offers the individual in the way of opportunities for better health and the more successful treatment of disease. Incidental to this main theme, the programs will explain the characteristics of the different fields of modern medicine and its specialties.

"Doctors at Work" will be broadcast from scripts by William J. Murphy, NBC script writer and author of many previous American Medical Association and NBC "shows" and other popular radio features. It will be produced under the direction of J. Clinton Stanley, director of "Medicine in the News," last season's successful American Medical Association and NBC health program. Supervision will be by the American Medical Association Bureau of Health Education, directed by Dr. W. W. Bauer.

These programs are broadcast on what is known in radio as a sustaining basis; that is, the time is furnished gratis by the radio network and local stations and no revenue is derived from the programs. Therefore, local stations may or may not take the programs, at their discretion, except those stations which are owned and operated by the National Broadcasting Company.

The programs will dramatize what modern medicine offers the individual in the way of opportunities for better health and the more successful treatment of disease. Incidental to this main theme the programs will explain the characteristics of the different fields of modern medicine and its specialties.

† In the front advertising section of *The Journal of the American Medical Association*, various rosters of national officers and organizations appear each week, each list being printed about every fourth week.

\* County societies giving medical broadcasts are requested to send information as soon as arranged (stating station, day, date and hour, and subject) to CALIFORNIA AND WESTERN MEDICINE, 450 Sutter Street, San Francisco, for inclusion in this column.

The next programs to be broadcast, together with their dates and their topics, are as follows:

January 1\*—Otorhinolaryngologist.

January 8—Your Eyes.

January 12—Best Foot Forward.

Descriptive posters for local distribution may be had gratis from the Bureau of Health Education, American Medical Association, 535 North Dearborn Street, Chicago. Program titles will be announced weekly in *The Journal of the American Medical Association*, and monthly in *Hygeia, the Health Magazine*.

American Medical Association Broadcasts: "Medicine in the News."—The American Medical Association and the National Broadcasting Company have announced "Medicine in the News," on timely topics from medical news of the week. Thursdays, 4:30 p. m., Eastern standard time (1:30 p. m., Pacific standard time), Blue Network, coast to coast. Thirty weeks. Opened on November 2, 1939. Facts, drama, entertainment, music.

#### Pacific States:

KECA	Los Angeles	KEX	Portland
KFSD	San Diego	KJR	Seattle
KGO	San Francisco	KTMS	Santa Barbara
	KGA	Spokane	

\* \* \*

### Los Angeles County Medical Association.

The radio broadcast program for the Los Angeles County Medical Association for the month of January is as follows:

Saturday, January 4—KFI, 9:45 a. m., The Road of Health.  
Saturday, January 4—KFAC, 10:15 a. m., Your Doctor and You.

Saturday, January 11—KFI, 9:45 a. m., The Road of Health.  
Saturday, January 11—KFAC, 10:15 a. m., Your Doctor and You.

Saturday, January 18—KFI, 9:45 a. m., The Road of Health.  
Saturday, January 18—KFAC, 10:15 a. m., Your Doctor and You.

Saturday, January 25—KFI, 9:45 a. m., The Road of Health.  
Saturday, January 25—KFAC, 10:15 a. m., Your Doctor and You.

**Bust of Hippocrates to University of California.**—On Friday afternoon, December 6, 1940, at four o'clock, in Toland Hall, University of California Hospital, the Department of Medical History and Bibliography held a short tributary celebration to commemorate the birth of Hippocrates, 400 B. C., at which a bust of the "Father of Medicine" was presented to the Medical School by Dr. Pan S. Codellas and the Greek-American friends of the University of California.

Dr. Langley Porter acted as chairman. The speakers for this occasion were Dr. William Dock and Dr. Frederick Reichert from Stanford, and Dr. Pan S. Codellas, Dr. William J. Kerr, Chauncey D. Leake, Ph.D., Dr. S. P. Lucia, and Dr. J. B. deC. M. Saunders.

Following the celebration, tea was served in the Crummer Room, where an exhibit of Hippocratic literature was on display.

\* This program only will be broadcast one hour and a half earlier than the regular scheduled time in order to clear the network for international broadcasts later in the evening.

**American Orthopsychiatric Association.**—The eighteenth annual meeting of the American Orthopsychiatric Association, 1790 Broadway, New York City, an organization for the study and treatment of behavior and its disorders, will be held at the Hotel Pennsylvania, New York City, on February 20, 21, and 22, 1941. A registration fee will be charged for nonmembers. Preliminary program will be sent on request.

**The American Social Hygiene Association.**—National Social Hygiene Day, one of America's leading public health events, will be observed for the fifth time on February 5, 1941.

Fifth Social Hygiene Day will be the spearhead of a concerted drive to safeguard men in military and naval training camps and in essential industries from the ravages of venereal disease. The effort this year is aimed at reducing commercialized prostitution to a minimum and keeping syphilis and gonorrhea infection rates as low as possible in army, navy, and defense industrial personnel.

Plans for the annual event include more than five thousand community meetings in all parts of the country and four regional conferences to be held in Philadelphia, St. Louis, New Orleans, and Los Angeles.

Speaking at a recent meeting of social hygiene executives and medical officers in Washington, Dr. Ray Lyman Wilbur, President, American Social Hygiene Association and former Secretary of the Interior, called upon the public and civilian officials to cooperate in making their communities safe from infection.

**American Red Cross: Ski Cautions.**—Mountain trails; heavy, snow-laden hemlocks; crisp air; flashing colorful jackets; packed snow; and a clear day. Ideal for skiing. And this year, if weather conditions are conducive, anywhere from three to five million persons will seek exhilaration, exercise, and good health in this form of recreation. Its popularity has been growing with tremendous strides each year.

For a while skiing grew so quickly in popularity that safety was unable to keep up with it. Thousands of novices, seeing old-timers skimming down the trails with grace and ease, were minded to do likewise. The result frequently was a wicked spill with occasional injuries of more or less serious nature.

Fatigue has been found a large contributing factor in accidents. As the skier tires inattention comes on. He may not see slight irregularities of trail or slope. At the same time, the failing visibility of late afternoon makes it harder to pick a safe course. Sudden changes of temperature and weather may completely alter the safety of a trail. As the sun slips behind the mountain, snow hardens rapidly and may become crusted. Hard-packed trails become icy with use and where, an hour before, a turn might be made easily, the skier may now skid into the woods at tremendous speed.

The following rules if carefully followed will enable the skier, whether novice or old-timer, to avoid many an accident:

Don't start down a steep slope unless you know how to slow down or stop.

Wear goggles if out for any length of time. Snow blindness may be extremely painful and serious.

Stay well to the side of the trail when climbing, and avoid getting in the way of others coming down.

Slow down when rounding blind turns.

Travel in groups and stay together, especially on the higher slopes.

Observe snow conditions and watch for changes, especially in the late afternoon after a comparatively warm day.

Bear in mind that, even though a ski accident may be slight, injuries are aggravated by cold weather, and the distance from medical care is generally great.

**Pan-American Congress of Ophthalmology.**—Pan-American relationships took another step forward in the field of medicine when the Pan-American Congress of Ophthalmology was organized on a permanent basis at the meeting of the first congress in Cleveland, October 11-12, under the auspices of the American Academy of Ophthalmology and Otolaryngology, 1500 Medical Arts Building, Omaha, Nebraska.

Montevideo was tentatively selected as the place of the next meeting, to be held in 1943.

Eighteen delegates, representing governments, universities, hospitals, and medical societies in Brazil, Chile, Costa Rica, Cuba, Colombia, Guatemala, Panama, and Puerto Rico were present in Cleveland. An extensive program of scientific papers was presented, about equally divided between English on the one hand and Spanish and Portuguese on the other. English papers were discussed by Latin-American speakers; those in Spanish or Portuguese, by the English-speaking physicians.

The language difficulty was overcome successfully by the use of slides. Extensive summaries of the papers were projected on the slides in Spanish or Portuguese for the English ones, or in English for those given in the other languages.

#### Department of Health, City of Los Angeles: Bulletin Regarding Sulfathiazole.—A recent bulletin follows:

A study of more than six hundred cases of gonorrhea in the male, treated with sulfathiazole, demonstrates *Sulfathiazole* as the drug of choice in the sulfonamide family of chemotherapeutic agents. Sulfathiazole shows a very high therapeutic efficiency (79 per cent) and yields a minimum of annoying side reactions (3 per cent) and toxic manifestations.

*Sulfapyridine*, a drug of equal or slightly greater effectiveness, is handicapped by the high proportion of disturbing gastro-intestinal symptoms.

*Sulfanilamide*, is not only appreciably less effective than the preceding drugs, but its administration is attended by frequent minor side reactions and serious toxic manifestations.

None of the sulfonamides eliminate the necessity of thorough examinations and intelligent diagnoses—for failures can be reduced to a minimum only by recognition of the location of suppurative foci—and then reduction by appropriate local therapy.

Excellent responses (80 per cent) were obtained by the use of 23 grams of sulfathiazole over a period of six and one-half days. This period may be extended for more stubborn cases; in our series nine days was the average period.

**Dosage.**—Sulfathiazole is started with two tablets (one gram) four times daily for two to four days, and then dropped to two tablets three times daily for the remaining portion of the usual seven- to ten-day period. If the discharge and shreds have entirely cleared, we consider the course ended. If a slight discharge or shreds persist even with negative smears, or if, at the onset, there were any complicating suppurative areas, such as peri-urethral abscesses, prostatitis, etc., the medication is continued on a maintenance dose of two to three grams daily while the indicated local measures are being taken for their eradication.

**Local Therapy.**—Reasoning by analogy from the experience with other sulfonamide drugs, local therapy increases the per cent of cure even of infections limited to the anterior urethra. Low pressure permanganate irrigations are used with optional silver proteinate instillations at home. Anteroposterior infections, particularly if the prostate, by palpation, indicates any degree of suppuration, are given through and through (posterior) irrigations and prostatic massage.

Sulfathiazole prevents local or metastatic extension by this supposedly radical procedure and diminishes the number of recurrences.

The patient should be seen at frequent intervals, observed carefully and must not be dismissed as cured until adequate tests of cure have been performed.

Cultures of the prostatic fluid and urethral strippings should be included in these tests before dismissal of the patient. This test offers the most reliable index to the asymptomatic carrier. In our series, 20 per cent of these cases were found to harbor gonococci.



**Transparent Woman Exhibit.**—After visiting cities from coast to coast on its public health educational tour during the past four years, where it was exhibited before important medical groups and to the laity under the sponsorship of various medical societies and academies of medicine, the Transparent Woman exhibit, sponsored by S. H. Camp & Company, was donated to the Medical Section of the Museum of Science and Industry, Chicago.

It is estimated that approximately eight million persons, including many thousands of physicians, viewed the exhibit on its tour of the nation.

**American College of Surgeons.**—The American College of Surgeons, founded by surgeons of the United States and Canada in 1913, with headquarters at 40 East Erie Street, Chicago, has issued the following analysis of work of the Credentials Committees for 1940:

*611 Admitted to Fellowship on October 21, 1940*

592 from United States and United States Possessions; 6 from Canada; 13 from other countries.

*1,301 Applicants Interviewed by Committees on Applicants*

346 applicants for fellowship

355 applicants for the junior candidate group

*1,536 Applications for Fellowship Presented to the Credentials Committees*

The above figures include fifteen applications considered by the Central Credentials Committee from countries having no local committees.

688 (45 per cent) recommended for fellowship (683 with examination, five without examination); 605 (39 per cent) postponed; 243 (16 per cent) not recommended.

*1,105 Applications for the Junior Candidate Group Considered by the Credentials Committees*

The above figure includes all applications for the junior candidate group. The applications for the junior candidate group are submitted annually to the respective state and provincial Credentials Committee.

*670 Sets of Records Submitted*

664 sets of records reviewed (605 accepted, 50 not accepted); 6 not reviewed.

**Third Annual Congress on Industrial Health.**—The third annual session, sponsored by the Council on Industrial Health of the American Medical Association, will be held in the Palmer House, Chicago, on January 13, and 14, 1941. For further information, address American Medical Association Council on Industrial Health, 535 North Dearborn, Chicago, or Robert T. Legge, M. D., Berkeley.

MONDAY MORNING, 9:00

Registration. No Fee. Red Lacquer Room

MONDAY MORNING, 9:45

Red Lacquer Room

Stanley J. Seeger, M. D., Presiding

Report of the Council on Industrial Health—Stanley J. Seeger, M. D., Chairman, Milwaukee.

The Physician in Industry and National Defense—Irvine Abell, M. D., Chairman, Health and Medical Committee of the Council of National Defense, Louisville, Kentucky. Current Needs in Industrial Hygiene Research—Philip Drinker, Professor of Industrial Hygiene, Harvard University, Boston.

The Special Nature of Industrial Practice—C. O. Sappington, M. D., Dr. P. H., Industrial Hygiene Consultant, Chicago.

Disability Evaluation in Silicosis—J. L. Blaisdell, M. D., Porcupine Clinic for Silicosis Research, St. Mary's Hospital, Timmins, Ontario.

MONDAY AFTERNOON, 2:00

Red Lacquer Room

Clarence D. Selby, M. D., Presiding

*Hand Injuries*

Anatomic Diagnosis of Injuries of the Hand—James M. Winfield, M. D., Associate Professor of Surgery, Wayne University College of Medicine, Detroit.

Treatment of Superficial Hand Injuries and Burns—Harvey S. Allen, M. D., Clinical Assistant in Surgery, Northwestern University Medical School, Chicago.

Division of the Nerves and Tendons of the Hand—Michael L. Mason, M. D., Associate Professor of Surgery, Northwestern University Medical School, Chicago.

Importance of Purposeful Splinting Following Injuries of the Hand—Henry C. Marble, M. D., Boston.  
Prevention and Treatment of Hand Infections—Sumner L. Koch, M. D., Associate Professor of Surgery, Northwestern University Medical School, Chicago.

MONDAY AFTERNOON, 2:30

Crystal Room

Leverett D. Bristol, M. D., Presiding

*Availability of Trained Industrial Health Personnel*

The Industrial Nurse—Ruth Houlton, R. N., Secretary, Industrial Nursing Section, National Organization for Public Health Nursing, New York City.

The Industrial Hygiene Engineer—Warren A. Cook, President, American Industrial Hygiene Association, Chicago.

The Safety Engineer—W. H. Cameron, Managing Director, National Safety Council, Inc., Chicago.

The Medical Industrial Hygienist—Paul A. Neal, M. D., Chief of the Division of Industrial Hygiene, National Institute of Health, United States Public Health Service, Bethesda, Maryland.

The Physician in Industry—Robert T. Legge, M. D., University of California, Berkeley, California.

MONDAY EVENING, 6:30

Crystal Room

An informal dinner and round-table discussion, intended primarily for State and County Medical Society Committees on Industrial Health, will be held. The subject matter for discussion will include problems of organization and plans for future activity.

TUESDAY MORNING, 9:30

Red Lacquer Room

Henry H. Kessler, M. D., Presiding

Employment of the Physically Handicapped—D. L. Lynch, M. D., President, American Association of Industrial Physicians and Surgeons, Boston.

Aging as a Problem of Industrial Health—Edward J. Stieglitz, M. D., Research Associate in Gerontology, National Institute of Health, United States Public Health Service, Bethesda, Maryland.

*Acute Respiratory Disease in Industry*

Incidence and Costs of Acute Respiratory Disease in Industry—Anthony J. Lanza, M. D., Assistant Medical Director, Metropolitan Life Insurance Company, New York City.

Respiratory Disease and Air Conditioning—Carey P. McCord, M. D., Chairman, Committee on Air Conditioning of the American Medical Association, Detroit.

The Role of the Physician in Industry in the Control of Acute Respiratory Disease—George M. Piersol, M. D., Philadelphia.

TUESDAY AFTERNOON, 2:00

Red Lacquer Room

Harvey Bartle, M. D., Presiding

*Industrial Ophthalmology*

Economic Importance of Visual Disability in Industry—Leonard Greenburg, M. D., Chairman, Industrial Advisory Committee of the National Society for the Prevention of Blindness, New York City.

Essentials of First Aid and Later Management of Industrial Eye Injuries—Sydney Walker, Jr., M. D., Chicago; Hanford L. Auten, M. D., Chicago.

Detection and Control of Defective Vision in Industry—Arthur M. Culler, M. D., Dayton, Ohio.

Protective Equipment for Eyes in Industry—Thomas D. Allen, M. D., Associate Clinical Professor of Ophthalmology at Rush Medical College, Chicago; Henry F. Carman, M. D., San Francisco.

WEDNESDAY, JANUARY 15

*Clinics and Demonstrations in Industrial Medicine, Hygiene, and Traumatic Surgery*

Arranged by

The Chicago Medical Society  
Carnegie-Illinois Steel Corporation  
South Chicago, Illinois, and Gary, Indiana  
Dr. Philip Kreuscher and Associates

Clinic and demonstration available to a limited number of physicians and surgeons interested in care of the injured.

Treatment of Fresh Wounds.

Treatment of Burns. (Motion Picture.)

Fracture Management.

Prevention and Management of Heat Sickness.

Prevention and Treatment of Carbon Monoxide Poisoning.

Demonstration and Discussion of Safety Methods.

Plant Inspection.

10 a. m. *Clinic and Symposium on Industrial Dermatoses*  
Francis E. Seneer, M. D., Presiding

Criteria for diagnosis, diagnostic techniques and demonstration of patients arranged with the assistance of the Joint Committee on Industrial Dermatoses of the Section on Dermatology and Syphilology of the American Medical Association, and of the American Dermatological Association.

2 p. m. *Symposium on Occupational Diseases*

Lloyd L. Arnold, M. D., Presiding

The Industrial Hygiene Survey. An outline of tested procedure to detect and evaluate industrial health exposures, adaptable to both large and small plants.

K. M. Morse, Industrial Hygienist, Illinois State Department of Public Health, Chicago.

Principles of Control Over Industrial Health Exposures. A description of progressive steps necessary to control industrial health exposures.

Donald E. Cummings, Director, Division of Industrial Hygiene, University of Colorado School of Medicine and Hospitals, Denver.

Pitfalls in Occupational Disease Diagnosis. A discussion of ways in which occupational intoxications simulate other diseases, with emphasis on differential diagnosis.

M. H. Kronenberg, M. D., Chief of Division of Industrial Hygiene, Illinois State Department of Public Health, Chicago.

Occupational Disease Testimony. Instruction for the physician in effective presentation of medical testimony on occupational diseases before workmen's compensation administrators.

James J. McKenna, Chicago.

At convenient times during the day there will be demonstrations of laboratory and field equipment used to detect and evaluate industrial health exposures. These demonstrations are arranged by the Division of Industrial Hygiene of the Illinois State Department of Public Health.

**Press Clippings.**—Some news items from the daily press on matters related to medical practice follow:

**Second California Draft Call Issued**

*Quotas Expected Thursday With Inductions for 6,231 Conscripts to Start on January 20*

Sacramento, December 23 (AP).—Adjutant-General R. E. Mittelstaedt, Director of Selective Service, today announced the receipt of California's second draft call, requesting 6,231 conscripts for compulsory military training.

The second phase of the conscription program will become effective on January 20.

Draft officials immediately began setting up quotas for the State's 284 draft boards and expect to have them ready by Thursday.

Under the new call, the men will be inducted as follows: January 20, 519 men; January 21, 519; January 22, 522; January 23, 522; January 24, 245; January 25, 245; January 27, 530; January 28, 530; January 29, 530; January 30, 530; January 31, 530; February 1, 530; February 3, 479.

The men will report to induction stations in Sacramento, San Francisco, and Los Angeles.

The Army has requested 33,017 conscripts from California by June 30. Captain Kenneth Leitch, Assistant Director of Selective Service, said he expects more calls in January, with the greatest demands being made in February and March.—Los Angeles Times, December 24, 1940.

**High Court to Rule on Indigent Act**

Washington, Dec. 16 (UP).—The U. S. Supreme Court agreed today to determine the constitutionality of a California law making it a misdemeanor to assist in bringing an indigent person into the State.

The test case arose in Marysville, where Fred F. Edwards was sentenced to six months in jail on charges of bringing his brother-in-law, Frank Duncan, from Spur, Texas, to California a year ago.

Edwards admitted Duncan was jobless when he arrived and lived at the Edwards home until he was given assistance by the Federal Farm Security Administration.

State courts upheld the act and Edwards' conviction, and the Marysville man appealed to the Supreme Court on grounds that every citizen of the United States has a constitutional right to freedom of movement into any state he sees fit.

He held further that the California act was an attempt to regulate a form of interstate commerce, thus invading a field reserved by the Constitution to the Federal Government. . . .—San Francisco News, December 16.

**New Migrant Inquiry Set**

Washington, Dec. 17 (UP).—The House Committee investigating migrant worker problems plans to recommend

extension of New Deal social legislation to "industrialized" farmers, it was learned today.

The recommendations involve application of the Wage-Hour Act, the National Labor Relations Act and the Social Security Act to laborers employed by large, industrial farming enterprises. They also suggest limitations of AAA payments to such farms.

The committee's report, Chairman John H. Tolan (D., Calif.) said, will be based on a summary of the chief recommendations made by the 250 witnesses who testified. It will not be formally presented to Congress until after the first of the year.

The summary is being prepared by Dr. Robert K. Lamb, chief investigator for the committee.—San Francisco News, December 17.

**Medical Examiners Decide to Conform to Rules of Court**

Dr. Clark L. Abbott of Oakland yesterday was elected president of the State Board of Medical Examiners at a meeting in the State Building. He succeeds Dr. William R. Molony, Sr., whose term expired last January.

Dr. George Thomason of Los Angeles will fill Doctor Abbott's former post of vice-president, and Dr. Charles B. Pinkham, veteran secretary-treasurer of the board, was returned to his office by the vote.

As a result of opinions lost by the board in the courts, it was decided that more thorough investigations will be conducted in the future with a view of compiling all evidence in a manner acceptable to trial judges.

Such a policy, however, will not impair the fairness of inquiries or board hearings, it was pointed out.—Los Angeles Times, December 7.

**A. M. A. Will Issue War-Medicine Publication**

Chicago, Dec. 12 (INS).—A new publication, War Medicine, will be issued by the American Medical Association as a part of the association's contribution to America's preparedness program, it was announced in the association's journal today.

Colonel C. C. Hillman, Commander Charles S. Stephenson and Dr. R. R. Spencer were named to represent the Army, Navy and P. S. public health service.—San Francisco Call-Bulletin, December 12.

**Child Health Aid Will Be Started**

*State to Initiate New Program in Counties*

Medical care will be extended to children suffering from rheumatic fever and heart disease in two California counties through the crippled children's services of the State Department of Public Health, Dr. Bertram P. Brown, state health director, announced yesterday.

California is one of the first states to initiate this new service supported by social security funds administered by the United States Children's Bureau. The California program will start the first of the year in Contra Costa and Yolo counties.

The program will be conducted along the lines of the established services to other crippled children. Anyone under 21 years of age will be eligible for diagnosis. Patients whose parents can afford to pay for care will be placed under the treatment of a private physician.

The state will provide care of other children suffering from rheumatic fever or heart disease. When necessary, hospitalization and convalescent care will be given.—San Francisco Examiner, December 17, 1940.

**Parents Lose Arm Battle**

Sacramento juvenile court gave 14-year-old Kenneth Northrup of Brighton a new chance yesterday—a chance that may make his broken right arm whole again.

Presiding Judge Peter J. Shields took Kenneth away from his parents, Mr. and Mrs. Martin Northrup, made the boy a ward of the court, and ordered Probation Officer C. E. Wilson to take him to Sacramento County Hospital for medical treatment that will require six weeks.

Kenneth broke his arm eighteen months ago, but his parents, members of the Church of the First Born, refused him medical attention on the grounds it was against their religious beliefs and on the grounds Kenneth would be healed by the Supreme Being. Meanwhile, the broken bones began to decay.

The boy and his parents were brought into court by a petition filed by J. Francis O'Shea, chief deputy district attorney.—Sacramento Union, December 6, 1940.

**Medical Corps Said Denied Recognition**

Chicago, December 7 (UP).—The Journal of the American Medical Association today criticized the government for its failure to honor members of the navy medical corps who assisted in life-saving operations in the disaster of the submarine Squalus in 1939.

In an editorial, "Life-Saving Service Without Recognition," the current issue of The Journal said success of the salvage work on the submarine was made possible

largely because of "some extraordinary" scientific investigations by members of the U. S. navy medical corps in 1932 and that the medical personnel who took part in the salvage, except for two pharmacists' mates, were not given recognition.—*San Bernardino Sun*, December 8, 1940.

#### Lunacy Board Appointment

Dr. Harold E. Fraser, personal physician to the late Governor James Rolph, Jr., was the choice today of superior court judges to the city's Lunacy Commission. Doctor Fraser succeeds the late Dr. Tilton E. Tillman.—*San Francisco Call-Bulletin*, December 17, 1940.

#### Coördination of Agencies Suggested

*Stephenson Conducts First Departmental Meeting in History*

The first department-wide meeting in the eleven-year history of the State Department of Professional and Vocational Standards this week produced suggestions that may lead to an extensive program of streamlining and elimination of waste effort. Director Dwight W. Stephenson announced yesterday. . . .

Another money-saving suggestion made was to establish referees for each board. As it is now, when, say the medical boards want to hold a hearing on a disciplinary matter, the majority of the board must sit—at per diem expense to the state, of course.

If referees were available many of the matters could be settled with just that one man sitting.

A sliding-scale on license fees for all boards was another proposition. . . .

Every board is self-sustaining by law, and funds from one board cannot be transferred to another. Stephenson does not recommend any change in this set-up—he only wants a graduating scale put in. . . .

All of these changes will require legislative action.

The sixteen boards in the department govern the following vocations and professions:

Accountants, architects, barbers, chiropractors, contractors, dentists, doctors, engineers, funeral directors, nurses, optometrists, osteopaths, pharmacists, ship brokers, veterinarians and contractors.—*Sacramento Union*, November 29, 1940.

## LETTERS

### Concerning Change of Name: Insurance Association of Approved Hospitals.

Oakland, California,  
November 12, 1940.

*To the Editor:*—This is to notify you that the Insurance Association of Approved Hospitals will henceforth be known as *Hospital Service of California*, and the new address will be 364 Fourteenth Street, Oakland.

Very truly yours,

BYRON F. ASHTON, *Manager*.

### Concerning Meeting of American College of Surgeons.

(COPY)

AMERICAN COLLEGE OF SURGEONS  
FOUNDED BY SURGEONS OF THE UNITED STATES  
AND CANADA, 1913

Chicago, December 17, 1940.

*To the Editor:*—Will you kindly insert in your notices of coming events the following sectional meetings of the American College of Surgeons. Program details will be sent you later covering the meeting in your area. . . .

March 26-28, Salt Lake City, Hotel Utah. Participating states: Oregon, Washington, California, Nevada, Idaho, Wyoming, New Mexico, Arizona, Colorado, Montana, and Utah.

Hospital conferences will be held in connection with each of these meetings. Fellows of the College, members of the medical profession at large, and persons interested in the institutional care of the sick and injured, are invited to the sectional meetings; on the final evening of each meeting, a meeting on health conservation, to which the public is invited will be held.

40 East Erie Street.

(Signed) AMERICAN COLLEGE OF SURGEONS.

### Concerning Two Letters of Appreciation.

(COPY)

CALIFORNIA TUBERCULOSIS ASSOCIATION

San Francisco, California,  
December 16, 1940.

*To the Editor:*—Many thanks to you for carrying the article "Tuberculosis and Racial Groups" in the December issue of *CALIFORNIA AND WESTERN MEDICINE*. It is very helpful to us to have such an article in the *JOURNAL* at this time, since the awareness of physicians of our Christmas Seal sale is an important factor in the success of the campaign.

45 Second Street.

With kindest regards, I am

Sincerely yours,

W. F. HIGBY,  
*Executive Secretary.*

(COPY)

AMERICAN RED CROSS

FOUNDED 1881 UNDER THE TREATY OF GENEVA

Washington, D. C.,  
December 2, 1940.

*To the Editor:*—The national officers of the American Red Cross are truly appreciative of the splendid cooperation given through the columns of your publication in our annual membership campaign. Your generous aid in thus reaching a wider circle of readers has been particularly important because of the heavy responsibilities devolving upon our organization as a result of our national defense program.

Again let me express our deep appreciation for your cooperation.

Sincerely yours,

G. STEWART BROWN,  
*National Director,  
Public Information Service.*

### Concerning a Lecturer (C. A. de Vere) on "Anatomy of the Head and Neck."

STATE OF CALIFORNIA

DEPARTMENT OF

PROFESSIONAL AND VOCATIONAL STANDARDS

BOARD OF MEDICAL EXAMINERS

Sacramento, California,  
December 28, 1940.

George H. Kress, M. D., Editor,  
San Francisco, California.

Re: "Dr." C. Augustus de Vere.

Dear Doctor Kress:

Reports have come to us from various sections of the state that an individual who signs his name C. Augustus de Vere, claiming to be "Director of Anatomy, Division of Educational Courses," New York is giving lecture courses (for a fee) on the "anatomy of the head and neck." One of our correspondents related, "I did not complete the course. After hearing him talk, I was quite certain he was no authority on anatomy."

Your files should show a letter signed A. E. Anderson, M. D., on the letterhead of the California Medical Association dated June 14, 1939, re this individual; also copy of a letter addressed to G. H. Kress, M. D., Secretary, California Medical Association, dated Los Angeles, June 12, 1939, signed George D. Maner, M. D.; also your letter to Doctor Anderson, Fresno, California, dated June 14, 1939, and your letter to George D. Maner, M. D., dated June 13, 1939.

Dr. H. Verrill Findlay reported on November 7, 1940, that he had communicated with the American Medical As-



sociation and "they have replied they have no record of any such person having a medical degree."

Under date of July 1, 1939, Harold Rypins, M. D., Secretary of the New York Board of Medical Examiners, wrote:

"In reply to your letter of June 20, I beg to advise you that the records of this department fail to show that C. Augustus de Vere was ever licensed or registered to practice medicine in New York State, nor have we any information concerning him. I should be very glad to see a copy of his letterhead bearing 'Department of Education of New York.'"

It has been suggested that a news item published in CALIFORNIA AND WESTERN MEDICINE might curtail de Vere's activities.

Very truly yours,

C. B. PINKHAM, M. D.,  
Secretary-Treasurer.

#### Concerning Opportunities for Refugee Physicians.

(COPY)

AUSTRALIAN ASSOCIATED PRESS

New York, December 16, 1940.

The Editor,  
California and Western Medicine,  
450 Sutter Street,  
San Francisco, California.

Dear Sir:

Enclosed is a copy of a cable message received from Australia. It is forwarded in the belief that it may be of interest to you for publication.

229 West Forty-third Street.

Yours sincerely,

DAVID W. BAILEY,  
American Representative.

*Perth, West Australia, December 12.—The West Australian Parliament has passed a bill permitting alien refugee doctors to practice in country districts. The Executive Council is empowered to proclaim an area to be inadequately supplied with medical services as one for which regional registration may be granted adequately qualified alien doctors.*

*A hospital may also be declared an area for regional registration, and the registration confined to the hospital. The alien has the right of appeal against the Medical Board's refusal to register, and after holding registration for seven years for a regional area he may be registered throughout the State.*

*Sixteen country centres in West Australia are without doctors owing to enlistments in the army. New South Wales, Queensland, and South Australia permit registration of alien doctors who have completed a shortened course at an Australian University, but Victoria does not.*

#### Concerning Physicians and Dentists' Symphony Orchestra in San Francisco.

(COPY)

San Francisco, California,  
December 3, 1940.

Dear Doctor:

To meet a growing demand, there has been recently formed a symphony orchestra among members of the medical and dental professions under the direction of Mr. Walter Herbert, a prominent conductor. Doctors' orchestras have already been successfully established in New York, Boston, Philadelphia, and Cleveland.

The aim of this group is to give the members an opportunity to play their instruments and to become familiar with orchestral music, thus spending some hours of relaxation and pleasure. The rehearsals are held every week at the County Medical Society building on Washington Street. Mr. Herbert hopes to hold performances later, to which the doctors may invite their families and friends, therefore creating a form of entertainment which will be of value and pleasure to many. . . .

We are, therefore, soliciting those doctors and dentists who are not active members, trusting that they will be willing to give their support to this new organization. For any amount which you care to contribute, we shall be very grateful.

Please send checks to Dr. Ronald R. Pratt, 516 Sutter Street, San Francisco.

Yours very sincerely,

MRS. HANS BARKAN  
MRS. ROBERT ALEXANDER

#### Concerning County Health Officers: Opinion of Attorney General of California.

(COPY)

STATE OF CALIFORNIA  
DEPARTMENT OF  
PROFESSIONAL AND VOCATIONAL STANDARDS  
BOARD OF MEDICAL EXAMINERS

Sacramento, California,

December 13, 1940.

Re: County Health Officers.

To the Editor:—Enclosed please find a copy of Opinion 10070 rendered by the Attorney General July 19, 1935, which deals with unlicensed medical men serving as county health officers in this state.

Very truly yours,

C. B. PINKHAM, M. D.,  
Secretary-Treasurer.

♦ ♦ ♦

(COPY)  
STATE OF CALIFORNIA  
LEGAL DEPARTMENT

San Francisco, July 19, 1935.

Charles B. Pinkham, M. D.  
Secretary-Treasurer  
Board of Medical Examiners  
420 State Office Building  
Sacramento, California

Dear Sir:

In your communication of January 25, 1935, you ask whether a graduate of a reputable medical college who holds no form of license entitling him to practice any system of the healing art in the State of California may:

1. Accept official appointment as a salaried county health officer;
2. Give inoculations or in any way treat any ailment of the human system if so appointed;
3. Prescribe for occupants of camps for the unemployed;
4. Collect fees for such service from either the individual, county, state, or federal government.

In reply thereto permit me to state that Section 4225 of the Political Code provides that a county health officer "shall be a graduate of a medical college of good standing and repute." It does not require that such county health officer be licensed to practice medicine in this state. This requires an answer to your first question in the affirmative.

If such an unlicensed medical graduate undertook to give inoculations or in any way treat any ailment of the human system he would be violating Section 8 of the State Medical Practice Act, which permits licensed persons "to use drugs or what are known as medicinal preparations in or upon human beings and to use any and all other methods in the treatment of disease . . . or other physical or mental conditions." There would likewise be a violation of Section 17 of said Act in that such a person would be practicing or attempting to practice a system or mode of treating the sick or afflicted. This conclusion is in accordance with that reached in our opinion No. 10003, rendered to you under date of June 17, 1935, holding that the giving of inoculations constitutes the practice of medicine.

Your third question is answered in the negative. An unlicensed medical graduate is violating the sections last above referred to if he prescribes for anyone in the State of California.

The answer to your fourth question must likewise be in the negative, as an unlicensed person is not legally entitled to collect a fee from anyone for medical services.

Very truly yours,

U. S. WEBB, Attorney General.  
By (Signed) LIONEL BROWNE, Deputy.

## Concerning Essay Contest on Medical Subject.

(COPY)

MISSISSIPPI VALLEY MEDICAL SOCIETY

November 27, 1940.

To the Editor:—We will be grateful for any publicity you may give in your publication to the Mississippi Valley Medical Society's Annual Essay Contest, notice of which is enclosed.

Sincerely,

MISSISSIPPI VALLEY MEDICAL SOCIETY.

Harold Swanberg, M. D., Secretary.

\* \* \*

## Mississippi Valley Medical Society 1941 Essay Contest

The Mississippi Valley Medical Society offers annually a cash prize of \$100, a gold medal, and a certificate of award for the best unpublished essay on any subject of general medical interest (including medical economics) and of practical value to the general practitioner of medicine. Certificates of merit may also be granted to the physicians whose essays are rated second and third best. Contestants must be members of the American Medical Association who are residents of the United States. The winner will be invited to present his contribution before the next annual meeting of the Mississippi Valley Medical Society at Cedar Rapids, Iowa, October 1, 2, 3, 1941, the Society reserving the exclusive right to first publish the essay in its official publication. All contributions shall not exceed five thousand words, be type-written in English in manuscript form, submitted in five copies, and must be received not later than May 1, 1941. Further details may be secured from Harold Swanberg, M. D., Secretary, Mississippi Valley Medical Society, 209-224 W. C. U. Building, Quincy, Illinois.

## Concerning "Political Medicine" in Lieu of "Socialized Medicine."

Milwaukee, December 12, 1940.

To the Editor:—I suggest substituting the term "Political Medicine" for the terms "Federal," "State," or "Socialized Medicine," henceforth in all medical papers, speeches, and all publicity pertaining in any way to this subject. It will throw the issue squarely into the laps of the politicians, where it belongs and where it originated. It may not prove so easy for the politicians to explain to the public just why it should be necessary to force politics between the "patient and his physician."

Also, the use of the term "political medicine" is a clear and simple explanation to those persons who are "in the dark" as to the true meaning of "socialized medicine."

Very truly,

JOHN W. HANSEN, M. D.

## MEDICAL JURISPRUDENCE†

By HARTLEY F. PEART, ESQ.

San Francisco

## A California Court Again Holds That Mere Occurrence of Injury Does Not Establish Malpractice

For many years the decisions of the California courts had a tendency to apply to malpractice actions the rule of evidence, often referred to as "res ipsa loquitur" (the thing speaks for itself). This rule is to the effect that the mere occurrence of an injury when the thing which causes the injury is shown to be under the management of the defendant and the injury is such as in the ordinary course of things does not happen so long as those having the management use proper care, affords reasonable evidence, in

the absence of proper explanation by the defendant, that the injury arose from a want of care. Thus it had been held that the mere occurrence of an x-ray burn or an injury due to the failure to remove a sponge was of itself sufficient to raise a presumption of negligence. However, in *Engelking vs. Carlson*, decided in March, 1939 (commented upon in the medical jurisprudence article in the July, 1939, issue of CALIFORNIA AND WESTERN MEDICINE at page 66), the court abandoned its prior position and held that the mere discovery after an operation upon a plaintiff's knee that the external peroneal nerve had been severed, was not sufficient to establish negligence on the part of the physician without some actual evidence of carelessness during the operation.

In a very recent decision, *Guilliams vs. Hollywood Hospital, etc.*, 102 Cal. App. Dec. 565, the rule expressed in the *Engelking* decision was reiterated and extended to instances in which a hospital, as well as a physician, was defendant. In that case plaintiff's complaint alleged that he entered the defendant hospital as a patient for an operation on the right kidney; that some time after his admission, his second floater rib on the left side was broken as a result of defendant's negligence; that plaintiff did not know how such break actually occurred, whether it was before, during or after the operation. Some six weeks after the operation the break was discovered and plaintiff alleged that the hospital was guilty of negligence in not discovering the break at an earlier date. Plaintiff thus attempted to plead a case against the hospital by alleging negligence in very general terms.

The court, in sustaining a demurrer to the complaint, held that plaintiff had not alleged sufficient facts to place liability upon the defendant even if the facts alleged were found to be true. The court, in addition to stating that plaintiff's complaint showed that he had no knowledge as to how, when or where the rib was broken and thus had merely concluded negligence upon the part of the defendant by pure speculation, also held that while negligence may, as a rule, be charged in general terms under California rules of pleading, a plaintiff must, however, point out some act which was done and allege that it was done negligently. In *Guilliams'* complaint there were no facts set forth as to what the defendant did or omitted to do.

The plaintiff attempted to take advantage of the doctrine of "res ipsa loquitur," arguing that by merely placing himself in the hospital's hands, an inference should be raised that any injury occurring while such condition continued would be the result of negligence on the part of the hospital. The court held that the rule of res ipsa loquitur, even conceding it to be applicable, merely relieves a party from the duty of proving some act set out in the complaint. It does not relieve a party from pointing out in the complaint a certain act or omission and labeling it as having been negligently done. The court continued its opinion with the following statement, which infers that the doctrine of "res ipsa loquitur" would not apply to the case even though negligence had been sufficiently designated:

"Defendant hospital is in no sense an insurer, nor can it be successfully contended that there is anything about a hospital, as such, that is inherently dangerous. The attempt, therefore, of plaintiff, in the circumstances, to base a cause of action upon a lack of knowledge, as the complaint in substance affirmatively shows, finds no support in the law."

As to plaintiff's contention that his damage was increased by the delay in discovery of the break by the hospital, the court held that there could be no liability on the part of the hospital, since discovery of a broken rib and treatment of the same after discovery would constitute the practice of medicine, and that a hospital could not be charged with that duty since by Section 2008 of the Business and Professions Code the privilege of practicing medicine is denied to corporations.

† Editor's Note.—This department of CALIFORNIA AND WESTERN MEDICINE, presenting copy submitted by Hartley F. Peart, Esq., will contain excerpts from and syllabi of recent decisions and analyses of legal points and procedures of interest to the profession.

## TWENTY-FIVE YEARS AGO†

### EXCERPTS FROM OUR STATE MEDICAL JOURNAL

Vol. XIV, No. 1, January, 1916

#### From Some Editorial Notes:

1916.—Another whole, clean, new book to write things in; and this time it has 366 pages—that gives us one day more to do something worth while on that extra day of this new year. The man who gets to the point where he thinks there is nothing in the way of betterment or improvement that he can put into himself or his work ought to crawl off somewhere and die, quietly and unostentatiously, so as not to disturb the people who are trying to do things. It is a good world, though a bit troubled in spots just now [World War I], and there is such a lot to be done in it. . . .

Let's all make up our minds that we are going to write some good things on these 366 pages of ours this year, and, first of all, let's write on the first page—and all the others—that we are going to be mighty careful that we do not speak uncharitably or carelessly in a slighting way, of the other fellow's work or treatment or operation or whatever it may be. You can't always tell what the other fellow had to contend with, you know. And then, every little while, just to remind yourself, write a memorandum to the effect that you can never believe a patient when he criticizes a doctor—for he does not know what the doctor was trying to do and he is not competent to express an opinion anyhow. And then, just to reduce our pride in ourselves and our own wonderful achievements, we might write another occasional memorandum to ourselves, recalling some of our own blunders in diagnosis or treatment and some of the mistakes that we do not like to talk about in public; such things are quite wholesome, unless we are beyond all hope of redemption. . . .

And so, let it be a happy New Year, and a prosperous New Year, and best of all, for all of us, everyone, a better New Year!

State Society—Fresno, April 18, 19, 20, 1916.—The annual meeting of the State Society this year will be a notable one for many reasons. We had no meeting last year, owing to the fact that the American Medical Association came to San Francisco to meet with us, and an overwhelming majority of our members—or, officially, delegates—expressed a desire not to have two meetings, but to concentrate our energies on the American Medical Association meeting. The Society has not had a meeting away from the Coast for a number of years; the last time was at Sacramento. It has not met in the San Joaquin Valley since 1898, when the historic battle of the umbrella and the pencil occurred, in Fresno. Incidentally, three of our members were arrested during that session, though it may be said in passing that none of them had committed any crime more serious than riding a bicycle on the sidewalk.

Dr. William Ophüls, Dean.—It is a pleasure to announce, and it will be a pleasure to all his friends—and they are legion—to know that Doctor Ophüls has been appointed dean of the Medical School of Leland Stanford, Jr., University. Doctor Ophüls' kindness and good nature are no less great than his erudition, and during the years that he

(Continued in Front Advertising Section, Page 28)

†This column strives to mirror the work and aims of colleagues who bore the brunt of Association activities some twenty-five years ago. It is hoped that such presentation will be of interest to both old and new members.

## BOARD OF MEDICAL EXAMINERS OF THE STATE OF CALIFORNIA†

By CHARLES B. PINKHAM, M. D.  
Secretary-Treasurer

#### News

"Governor Olson announced today the appointment of Dr. Hugo M. Kersten, Los Angeles physician, to the State Board of Medical Examiners and the reappointment of Dr. Charles B. Pinkham of San Francisco. Doctor Kersten succeeds Dr. William R. Molony of Los Angeles, whose term expired last January 15." (Press dispatch dated Los Angeles, November 13, 1940, and printed in the *Sacramento Bee*, same date.)

"Dr. C. E. Schoff of Sacramento today resigned as a member of the State Board of Medical Examiners because of his health. He was first appointed to the Board February 1, 1929. His term will expire on January 15, 1941. Governor Culbert L. Olson's office said no successor has been named." (*Sacramento Bee*, November 20, 1940.)

"The first department-wide meeting in the eleven-year history of the State Department of Professional and Vocational Standards this week produced suggestions that may lead to an extensive program of streamlining and elimination of waste effort, Director Dwight W. Stephenson announced yesterday. . . . Stephenson suggested that instead of all sixteen boards in the department introducing their own bills in the legislature and battling each other on those measures, they get together beforehand, do their scrapping behind closed doors, and come to the solons with a unified program. Legal fees now cost the department approximately \$30,000 a biennium, the bulk of this going to the Attorney-General's office and the rest to two part-time attorneys. But, says Stephenson, the Attorney-General's office hasn't the time to render the boards proper service—it takes six months sometimes to get a legal written opinion. So the suggestion was made to hire two full-time attorneys, at \$5,000 for one and \$3,000 for the other per year. This, says the director, would not only cut the legal fees in half, but it would give all boards continual access to legal service. Another money-saving suggestion made was to establish referees for each board. As it is now, when, say the medical boards want to hold a hearing on a disciplinary matter, the majority of the board must sit—at per diem expense to the state, of course. If referees were available, many of the matters could be settled with just that one man sitting. . . . All of these changes will require legislative action. . . ." (*Sacramento Union*, November 29, 1940.)

#### PHYSICIANS AND SURGEONS RECEIVING CALIFORNIA LICENSES IN DECEMBER, 1940

Charles B. Pinkham, M. D., Secretary-Treasurer of the Board of Medical Examiners of the State of California, reports results of the written examination held in Sacramento, October 22 to 24, inclusive, 1940. The examination for physicians and surgeons covered nine subjects and included ninety questions. An average of 75 per cent is required to pass. Seventy-seven applicants wrote the examination. Included in the applicants were several graduates of foreign medical schools.

The highest mark for physicians and surgeons (98 7/9 per cent) was made by Maxwell Sender Kassel, M. D.,

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†The office addresses of the California State Board of Medical Examiners are printed in the roster on advertising page 6.